

SEQUENCE LISTING

<110> University of Utah Research Foundation
CogneRx, Inc.
Olivera, Baldomero M.
McIntosh, J. Michael
Garrett, James E.
Watkins, Maren
Cruz, Lourdes J.
Shon, Ki-Joon
Jacobsen, Richard
Jones, Robert M.
Cartier, G. Edward
Shen, Greg S.
Wagstaff, John D.

<120> Mu-Conopeptides

<130> 2314-280

<150> US 09/010,009
<151> 2001-07-23

<150> US 60/277,270
<151> 2001-03-21

<150> US 60/264,319
<151> 2001-01-29

<150> US 60/245,157
<151> 2000-11-03

<150> US 60/219,619
<151> 2000-07-21

<160> 520

<170> PatentIn version 3.0

<210> 1
<211> 280
<212> DNA
<213> Conus arenatus

<400> 1
caagaaggat cgatagcagt tcatgatgtc taaactggga gtcttcttga ccatctgtat 60
gcttcgttt ccccttactg ctcttccgct ggatggggat caacctgcag accgacacctgc 120
agagcgtatg caggacgact ttataactga gcatcatccc ctgtttgatc ctgtcaaacg 180
gtgttgcgag aggccatgca acataggatg cgtaccttgt tgttaatgac cagctttgtc 240
atcgcggcct catcaagcga ataagtaaaa cgattgcagt 280

<210> 2
<211> 67
<212> PRT
<213> Conus arenatus

<400> 2
Met Met Ser Lys Leu Gly Val Phe Leu Thr Ile Cys Met Leu Leu Phe
1 5 10 15
Pro Leu Thr Ala Leu Pro Leu Asp Gly Asp Gln Pro Ala Asp Arg Pro

20

25

30

Ala Glu Arg Met Gln Asp Asp Phe Ile Thr Glu His His Pro Leu Phe
 35 40 45

Asp Pro Val Lys Arg Cys Cys Glu Arg Pro Cys Asn Ile Gly Cys Val
 50 55 60

Pro Cys Cys
 65

<210> 3
 <211> 14
 <212> PRT
 <213> Conus arentus

<220>
 <221> PEPTIDE
 <222> (1)..(14)
 <223> Xaa at residue 3 is Glu or gamma-carboxy Glu; Xaa at residue 5 and 12 is Pro or Hyp

<400> 3
 Cys Cys Xaa Arg Xaa Cys Asn Ile Gly Cys Val Xaa Cys Cys
 1 5 10

<210> 4
 <211> 244
 <212> DNA
 <213> Conus atlanticus

<400> 4
 ggatccatga tgtctaaact gggagtcttg ttgaccatct gtctgcttct gtttccactt 60
 actgctcttc cgctggatga agatcaaccg gtacaccgac ctgcagagcg tatgcaggac 120
 atttcatctg atcaacatct cttctttgat ctcatcaaac ggtgctgcga gttgccatgc 180
 gggccaggct tttgcgtccc ttgttgctga catcaataac gtgttgatga ccaactttct 240
 cgag 244

<210> 5
 <211> 69
 <212> PRT
 <213> Conus atlanticus

<400> 5
 Gly Ser Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu
 1 5 10 15

Leu Phe Pro Leu Thr Ala Leu Pro Leu Asp Glu Asp Gln Pro Val His
 20 25 30

Arg Pro Ala Glu Arg Met Gln Asp Ile Ser Ser Asp Gln His Leu Phe
 35 40 45

Phe Asp Leu Ile Lys Arg Cys Cys Glu Leu Pro Cys Gly Pro Gly Phe
 50 55 60

Cys Val Pro Cys Cys
 65

<210> 6

<211> 15
 <212> PRT
 <213> Conus atlanticus

<220>
 <221> PEPTIDE
 <222> (1)..(15)
 <223> Xaa at residue 3 is Glu or gamma-carboxy Glu; Xaa at residue 5, 8
 and 13 is Pro or Hyp

<400> 6
 Cys Cys Xaa Leu Xaa Cys Gly Xaa Gly Phe Cys Val Xaa Cys Cys
 1 5 10 15

<210> 7
 <211> 310
 <212> DNA
 <213> Conus aurisiacus

<400> 7
 caagagggat cgatacgagt tcatgatgtc taaaactggga gtcttggta ccatctgttt 60
 gcttctgttt ccccttactg ctcttccatg ggatggagat caatctgtag accgacacctga 120
 agagcgtatg caggacgaca tttcatctga gcagcatccc ttgtttaatc agaaaaagaat 180
 gtgttgcggc gaaggccgga aatgccccag ctatttcaga aacagtcaga tttgtcattg 240
 ttgttaaatg acaacgtgtc gatgaccaac ttctgttatca cgactaatga ataagtaaaa 300
 cgattgcagt 310

<210> 8
 <211> 74
 <212> PRT
 <213> Conus aurisiacus

<400> 8
 Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
 1 5 10 15

Pro Leu Thr Ala Leu Pro Met Asp Gly Asp Gln Ser Val Asp Arg Pro
 20 25 30

Glu Glu Arg Met Gln Asp Asp Ile Ser Ser Glu Gln His Pro Leu Phe
 35 40 45

Asn Gln Lys Arg Met Cys Cys Gly Glu Gly Arg Lys Cys Pro Ser Tyr
 50 55 60

Phe Arg Asn Ser Gln Ile Cys His Cys Cys
 65 70

<210> 9
 <211> 22
 <212> PRT
 <213> Conus aurisiacus

<220>
 <221> PEPTIDE
 <222> (1)..(22)
 <223> Xaa at residue 5 is Glu or gamma-carboxy Glu; Xaa at residue 10 is
 Pro or Hyp; Xaa at residue 12 is Tyr, 125I-Tyr, mono-iodo-Tyr,
 di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr

<400> 9
 Met Cys Cys Gly Xaa Gly Arg Lys Cys Xaa Ser Xaa Phe Arg Asn Ser
 1 5 10 15

Gln Ile Cys His Cys Cys
 20

<210> 10
 <211> 257
 <212> DNA
 <213> Conus aurisiacus

<400> 10
 ggatccatga tgtctaaact gggagtcttg ttgaccatct gtttgcttct gtttcccctt 60
 actgctcttc cgatcgatgg agatcaatct gtagaccgac ctgcagagcg tatgcaggat 120
 gacatttcat ctgagcagca tcgcttggc aatcagaaaa gaaggtgctg ccggtgccca 180
 tgcccccac aaatcgacgg tgaatattgt ggctgttgcc ttggatgata accgtgttga 240
 tgaccaactt tctcgag 257

<210> 11
 <211> 75
 <212> PRT
 <213> Conus aurisiacus

<400> 11
 Gly Ser Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu
 1 5 10 15

Leu Phe Pro Leu Thr Ala Leu Pro Ile Asp Gly Asp Gln Ser Val Asp
 20 25 30

Arg Pro Ala Glu Arg Met Gln Asp Asp Ile Ser Ser Glu Gln His Arg
 35 40 45

Leu Phe Asn Gln Lys Arg Arg Cys Cys Arg Trp Pro Cys Pro Arg Gln
 50 55 60

Ile Asp Gly Glu Tyr Cys Gly Cys Cys Leu Gly
 65 70 75

<210> 12
 <211> 19
 <212> PRT
 <213> Conus aurisiacus

<220>
 <221> PEPTIDE
 <222> (1)..(19)
 <223> Xaa at residue 13 is Glu or gamma-carboxy Glu; Xaa at residue 5 and 7 is Pro or Hyp; Xaa at residue 4 is Trp or Bromo Trp; Xaa at residue 14 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr

<400> 12
 Cys Cys Arg Xaa Xaa Cys Xaa Arg Gln Ile Asp Gly Xaa Xaa Cys Gly
 1 5 10 15

Cys Cys Leu

<210> 13

<211> 262
 <212> DNA
 <213> Conus aurisiacus

<400> 13
 ggatccatga tgtctaaact gggagtcttg ttgaccatct gtctacttct gtttcccccctt 60
 actgctttc cgatggatgg agatcaacacct gcagaccaac ctgcagatcg tatgcaggac 120
 gacatttcat ctgagcagta tcccttgaaa gataagagac aaaagtgttg cactggaaag 180
 aaggggtcat gctccggcaa agcatgcaaa aatctcaaattt gttgctctgg acgataaacgt 240
 gttgatgacc aactttctcg ag 262

<210> 14
 <211> 78
 <212> PRT
 <213> Conus aurisiacus

<400> 14
 Gly Ser Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu
 1 5 10 15

Leu Phe Pro Leu Thr Ala Phe Pro Met Asp Gly Asp Gln Pro Ala Asp
 20 25 30

Gln Pro Ala Asp Arg Met Gln Asp Asp Ile Ser Ser Glu Gln Tyr Pro
 35 40 45

Leu Phe Asp Lys Arg Gln Lys Cys Cys Thr Gly Lys Lys Gly Ser Cys
 50 55 60

Ser Gly Lys Ala Cys Lys Asn Leu Lys Cys Cys Ser Gly Arg
 65 70 75

<210> 15
 <211> 23
 <212> PRT
 <213> Conus aurisiacus

<220>
 <221> PEPTIDE
 <222> (1)..(23)
 <223> Xaa at residue 1 is Gln or pyro-Glu

<400> 15
 Xaa Lys Cys Cys Thr Gly Lys Gly Ser Cys Ser Gly Lys Ala Cys
 1 5 10 15

Lys Asn Leu Lys Cys Cys Ser
 20

<210> 16
 <211> 232
 <212> DNA
 <213> Conus aurisiacus

<400> 16
 ggatccatga tgtctaaact gggagtcttg ctgaccatct gtctgcttct gtttccactt 60
 actgctgttc cgctggatgg agatcaacacct ctagaccgac acgcggagcg tatgcatgtat 120
 ggcatttcac ctaaacgcca tccctggaaa gatccgtca aacgggtttt caaggtgcaa 180

tgcgagtctt gcaccccttg ttgctaacgt gttgatgacc aactttctcg ag 232
 <210> 17
 <211> 68
 <212> PRT
 <213> Conus aurisiacus

<400> 17
 Gly Ser Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu
 1 5 10 15

Leu Phe Pro Leu Thr Ala Val Pro Leu Asp Gly Asp Gin Pro Leu Asp
 20 25 30

Arg His Ala Glu Arg Met His Asp Gly Ile Ser Pro Lys Arg His Pro
 35 40 45

Trp Phe Asp Pro Val Lys Arg Cys Cys Lys Val Gln Cys Glu Ser Cys
 50 55 60

Thr Pro Cys Cys
 65

<210> 18
 <211> 13
 <212> PRT
 <213> Conus aurisiacus

<220>
 <221> PEPTIDE
 <222> (1)..(13)
 <223> Xaa at residue 7 is Glu or gamma-carboxy Glu; Xaa at residue 11 is Pro or Hyp

<400> 18
 Cys Cys Lys Val Gln Cys Xaa Ser Cys Thr Xaa Cys Cys
 1 5 10

<210> 19
 <211> 241
 <212> DNA
 <213> Conus bandus

<400> 19
 ggatccatga tgtctaaact gggagtcgg ttgaccatct gtatgttct gtttccctc 60
 actgctctc cgtggatgg agatcaacct gcagaccgac ctgcagagcg tagtcaggac 120
 gtttcatctg aacagcatcc cttgtttgat cccgtcaaac ggtgttgcaa ctggccatgc 180
 tccatggat gcatcccttg ttgctactat taataacgtg ttgatgacca actttctcga 240
 g 241

<210> 20
 <211> 70
 <212> PRT
 <213> Conus bandus

<400> 20
 Gly Ser Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Met Leu
 1 5 10 15

Leu Phe Pro Leu Thr Ala Leu Pro Met Asp Gly Asp Gln Pro Ala Asp
 20 25 30

Arg Pro Ala Glu Arg Ser Gln Asp Val Ser Ser Glu Gln His Pro Leu
 35 40 45

Phe Asp Pro Val Lys Arg Cys Cys Asn Trp Pro Cys Ser Met Gly Cys
 50 55 60

Ile Pro Cys Cys Tyr Tyr
 65 70

<210> 21
 <211> 16
 <212> PRT
 <213> Conus bandus

<220>
 <221> PEPTIDE
 <222> (1)..(16)
 <223> Xaa at residue 5 and 12 is Pro or Hyp; Xaa at residue 4 is Trp or
 bromo-Trp; Xaa at residue 15 and 16 is Tyr, 125I-Tyr, mono-iodo-
 Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr

<400> 21
 Cys Cys Asn Xaa Xaa Cys Ser Met Gly Cys Ile Xaa Cys Cys Xaa Xaa
 1 5 10 15

<210> 22
 <211> 298
 <212> DNA
 <213> Conus betulinus

<400> 22
 caagaggat cgatagcagt tcatgatgtc taaactggga gtcttgttga cttctgtct 60
 gttctgttt cccctgactg ctcttccgct ggatgaagat caacctgcag accgacctgc 120
 agagcgtatg caggacattt catctgaaca gcatccctt tttgatcccg tcaaacggtg 180
 ttgcgaattt ccatgccatg gatgcgtccc ttgttgcgg ccttaataac gtgtggatga 240
 ccaactgtgt tatcacggcc acgtcaagtg tctaataatg aagtaaaatg attgcagt 298

<210> 23
 <211> 67
 <212> PRT
 <213> Conus betulinus

<400> 23
 Met Met Ser Lys Leu Gly Val Leu Leu Thr Phe Cys Leu Leu Leu Phe
 1 5 10 15

Pro Leu Thr Ala Leu Pro Leu Asp Glu Asp Gln Pro Ala Asp Arg Pro
 20 25 30

Ala Glu Arg Met Gln Asp Ile Ser Ser Glu Gln His Pro Leu Phe Asp
 35 40 45

Pro Val Lys Arg Cys Cys Glu Leu Pro Cys His Gly Cys Val Pro Cys
 50 55 60

Cys Trp Pro
 65

<210> 24
 <211> 15
 <212> PRT
 <213> Conus betulinus

<220>
 <221> PEPTIDE
 <222> (1)..(15)
 <223> Xaa at residue 3 is Glu or gamma-carboxy Glu; Xaa at residue 5, 11 and 15 is Pro or Hyp; Xaa at residue 14 is Trp or bromo-Trp

<400> 24
 Cys Cys Xaa Leu Xaa Cys His Gly Cys Val Xaa Cys Cys Xaa Xaa
 1 5 10 15

<210> 25
 <211> 298
 <212> DNA
 <213> Conus betulinus

<400> 25
 caagagggat cgatacgagt tcatgatgtc taaactggga gtcttggta ccttctgtct 60
 gcttctgttt cccctgactg ctcttccgct ggatgaagat caacctgcag accgacatgc 120
 agagcgtatg caggacattt cacctgaaca gcatccctcg tttgatcccg tcaaacggtg 180
 ttgcgggctg ccatgcaatg gatgcgtccc ttgttgcctgg ctttcataac gtgtggacga 240
 ccaactttgt tatacggcc acgtcaagtg tctgtatgaat aagtaaaacg attgcagt 298

<210> 26
 <211> 68
 <212> PRT
 <213> Conus betulinus

<400> 26
 Met Met Ser Lys Leu Gly Val Leu Leu Thr Phe Cys Leu Leu Leu Phe
 1 5 10 15

Pro Leu Thr Ala Leu Pro Leu Asp Glu Asp Gln Pro Ala Asp Arg His
 20 25 30

Ala Glu Arg Met Gln Asp Ile Ser Pro Glu Gln His Pro Ser Phe Asp
 35 40 45

Pro Val Lys Arg Cys Cys Gly Leu Pro Cys Asn Gly Cys Val Pro Cys
 50 55 60

Cys Trp Pro Ser
 65

<210> 27
 <211> 16
 <212> PRT
 <213> Conus betulinus

<220>
 <221> PEPTIDE
 <222> (1)..(16)
 <223> Xaa at residue 5, 11 and 15 is Pro or Hyp; Xaa at residue 14 is Trp or bromo-Trp

<400> 27
 Cys Cys Gly Leu Xaa Cys Asn Gly Cys Val Xaa Cys Cys Xaa Xaa Ser
 1 5 10 15

<210> 28
 <211> 282

<212> DNA
 <213> Conus betulinus

<400> 28
 caagaggat cgatagcagt tcatgatgtt taaactggga gtcttggta ccatctatat 60
 gcttcgttt cccttactg ctctccgct ggatggagat caacctgcag accaacctct 120
 agagcgcacg cagtatgaca tgttacgtgc agtgaatccc tggttgatc ccgtcaaaag 180
 gtgctgctcg aggaactgcg cagtatgcat cccttggta ccgaattggc cagttgatt 240
 atcgcggcca agagtctaat gaataagtaa aacgattgca gt 282

<210> 29
 <211> 71
 <212> PRT
 <213> Conus betulinus

<400> 29
 Met Met Phe Lys Leu Gly Val Leu Leu Thr Ile Tyr Met Leu Leu Phe
 1 5 10 15

Pro	Phe	Thr	Ala	Leu	Pro	Leu	Asp	Gly	Asp	Gln	Pro	Ala	Asp	Gln	Pro
20					25						30				

Leu Glu Arg Met Gln Tyr Asp Met Leu Arg Ala Val Asn Pro Trp Phe
 35 40 45

Asp	Pro	Val	Lys	Arg	Cys	Cys	Ser	Arg	Asn	Cys	Ala	Val	Cys	Ile	Pro
50					55						60				

Cys Cys Pro Asn Trp Pro Ala
 65 70

<210> 30
 <211> 18
 <212> PRT
 <213> Conus betulinus

<220>
 <221> PEPTIDE
 <222> (1)..(18)
 <223> Xaa at residue 11, 14 and 17 is Pro or Hyp; Xaa at residue 16 is
 Trp or bromo-Trp

<400> 30
 Cys Cys Ser Arg Asn Cys Ala Val Cys Ile Xaa Cys Cys Xaa Asn Xaa
 1 5 10 15

Xaa Ala

<210> 31
 <211> 325
 <212> DNA
 <213> Conus bullatus

<400> 31
 caagaaggat cgatagcagt tcatgatgtc taaactggga gtcttggta ccatctgtct 60
 gcttcgttt ccccttttg ctctccgca ggatggagat caacctgcag accgacacgtc 120
 agagcgtatg caggacgaca tttcatctga gcagaattcc ttgcttgaga agagagttac 180
 tgacaggtgc tgcaaaggga agagggaatg cggcagatgg tgcagagatc actcgcgttg 240

ttgcggtcga cgataagctg ttgatgacca gctttgttat cacggctaca tcaagtgtct 300
 agtgaataag taaaatgatt gcagt 325

<210> 32
 <211> 77
 <212> PRT
 <213> Conus bullatus
 <400> 32

Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
 1 5 10 15

Pro Leu Phe Ala Leu Pro Gln Asp Gly Asp Gln Pro Ala Asp Arg Pro
 20 25 30

Ala Glu Arg Met Gln Asp Asp Ile Ser Ser Glu Gln Asn Ser Leu Leu
 35 40 45

Glu Lys Arg Val Thr Asp Arg Cys Cys Lys Gly Lys Arg Glu Cys Gly
 50 55 60

Arg Trp Cys Arg Asp His Ser Arg Cys Cys Gly Arg Arg
 65 70 75

<210> 33
 <211> 23
 <212> PRT
 <213> Conus bullatus

<220>
 <221> PEPTIDE
 <222> (1)..(23)
 <223> Xaa at residue 11 is Glu or gamma-carboxy Glu; Xaa at residue 15
 is Trp or bromo-Trp

<400> 33
 Val Thr Asp Arg Cys Cys Lys Gly Lys Arg Xaa Cys Gly Arg Xaa Cys
 1 5 10 15

Arg Asp His Ser Arg Cys Cys
 20

<210> 34
 <211> 326
 <212> DNA
 <213> Conus bullatus

<400> 34
 caagagggat cgatacgagt tcatgatgtc taaaactggga gtcttggta ccatctgtct 60
 gcttcgttt ccccttttg ctcttcggca ggatggagat caacctgcag accgacacctgc 120
 agagcgtatg caggatgaca tttcatctga gcagaatccc ttgcttgaga agagagttgg 180
 tgacaggtgc tgcaaaggga agagggggtg cggcagatgg tgcagagatc actcacgttg 240
 ttgcggtcga cgataacgtg ttgatgacca gctttgttat cacggctaca tcaagtgtct 300
 tagtgattaa gtaaaacgtat tgcagt 326

<210> 35
 <211> 77
 <212> PRT
 <213> Conus bullatus

Glu Lys Arg Val Gly Glu Arg Cys Cys Lys Asn Gly Lys Arg Gly Cys
 50 55 60

Gly Arg Trp Cys Arg Asp His Ser Arg Cys Cys Gly Arg Arg
 65 70 75

<210> 39
 <211> 24
 <212> PRT
 <213> Conus bullatus

<220>
 <221> PEPTIDE
 <222> (1)..(24)
 <223> Xaa at residue 3 is Glu or gamma-carboxy Glu; Xaa at residue 16 is Trp or bromo-Trp

<400> 39
 Val Gly Xaa Arg Cys Cys Lys Asn Gly Lys Arg Gly Cys Gly Arg Xaa
 1 5 10 15

Cys Arg Asp His Ser Arg Cys Cys
 20

<210> 40
 <211> 337
 <212> DNA
 <213> Conus bullatus

<400> 40
 caagagggat cgatacgagt tcatgatgtc taaactggga gtcttggta ccatctgtct 60
 gttctgttt ccccttttg ctcttccgca ggacggagat caacctgcag accgacctgc 120
 agagcgtatg caggacgacc tttcatctga gcagcatccc ttgtttgaga agagaattgt 180
 tgacaggtgc tgcaacaaag ggaacggaa gagggggtgc agcagatggt gcagagatca 240
 ctcacgttgt tgcggtcgac gatgaactgt tcatgaccga ggcttggtt atcacggcta 300
 catcaagtgt ctagtgaata agtaaaacga ttgcagt 337

<210> 41
 <211> 80
 <212> PRT
 <213> Conus bullatus

<400> 41
 Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
 1 5 10 15

Pro Leu Phe Ala Leu Pro Gln Asp Gly Asp Gln Pro Ala Asp Arg Pro
 20 25 30

Ala Glu Arg Met Gln Asp Asp Leu Ser Ser Glu Gln His Pro Leu Phe
 35 40 45

Glu Lys Arg Ile Val Asp Arg Cys Cys Asn Lys Gly Asn Gly Lys Arg
 50 55 60

Gly Cys Ser Arg Trp Cys Arg Asp His Ser Arg Cys Cys Gly Arg Arg
 65 70 75 80

<210> 42

<211> 26
 <212> PRT
 <213> Conus bullatus

<220>
 <221> PEPTIDE
 <222> (1)..(26)
 <223> Xaa at residue 18 is Trp or bromo-Trp

<400> 42
 Ile Val Asp Arg Cys Cys Asn Lys Gly Asn Gly Lys Arg Gly Cys Ser
 1 5 10 15

Arg Xaa Cys Arg Asp His Ser Arg Cys Cys
 20 25

<210> 43
 <211> 337
 <212> DNA
 <213> Conus bullatus

<400> 43
 caagaaggat cgatagcagt tcatgatgtc taaactggga gtcttggta ccatctgtct 60
 gcttcgttt ccccttttg ctcttccgca ggatggagat caacctgcag accgaccctgc 120
 tgagcgtatg caggacgaca tttcatctga gcggaatccc ttgtttgaga agagcgttgg 180
 tttatattgc tgccgaccca aacccaacgg gcagatgtatg tgcgacagat ggtgcgaaaa 240
 aaactcacgt tggtgcggtc gacgataatg tggtgatgac cagcttggta atcaaggcta 300
 catcaagtat ctagtgaata agtaaaacga ttgcagt 337

<210> 44
 <211> 77
 <212> PRT
 <213> Conus bullatus

<400> 44
 Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
 1 5 10 15

Pro Leu Phe Ala Leu Pro Gln Asp Gly Asp Gln Pro Ala Asp Arg Pro
 20 25 30

Ala Glu Arg Met Gln Asp Asp Ile Ser Ser Asn Pro Leu Phe Glu Lys
 35 40 45

Ser Val Gly Cys Cys Arg Pro Lys Pro Asn Gly Gln Met Met Cys Asp
 50 55 60

Arg Trp Cys Glu Lys Asn Ser Arg Cys Cys Gly Arg Arg
 65 70 75

<210> 45
 <211> 27
 <212> PRT
 <213> Conus bullatus

<220>
 <221> PEPTIDE
 <222> (1)..(27)
 <223> Xaa at residue 21 is Glu or gamma-carboxy Glu; Xaa at residue 8 and 10 is Pro or Hyp; Xaa at residue 19 is Trp or bromo-Trp; Xaa a

t residue 4 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr

<400> 45

Val Gly Leu Xaa Cys Cys Arg Xaa Lys Xaa Asn Gly Gln Met Met Cys
1 5 10 15

Asp Arg Xaa Cys Xaa Lys Asn Ser Arg Cys Cys
20 25

<210> 46

<211> 323

<212> DNA

<213> Conus bullatus

<400> 46

caagaaggat cgatagcagt tcatgatgtc taaactggga gttttgttga ccatctgtct 60

gcttcgttt ccccttactg ctcttccgat ggatggagat caatctgtag accgacacctgc 120

agaacgtatg caggacgacc tttcatctga gcagcatccc ttgtttgttc agaaaagaag 180

gtgttgcggc gaaggcttga catgccccag atattggaaa aacagtcaga tttgtgcttg 240

ttgttaatg acaacgtgtc gatgaccaac ttccgtatca cgactacgccc aagtgtctaa 300

tgaataagta aaacgattgc agt 323

<210> 47

<211> 74

<212> PRT

<213> Conus bullatus

<400> 47

Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
1 5 10 15

Pro Leu Thr Ala Leu Pro Met Asp Gly Asp Gln Ser Val Asp Arg Pro
20 25 30

Ala Glu Arg Met Gln Asp Asp Leu Ser Ser Glu Gln His Pro Leu Phe
35 40 45

Val Gln Lys Arg Arg Cys Cys Gly Glu Gly Leu Thr Cys Pro Arg Tyr
50 55 60

Trp Lys Asn Ser Gln Ile Cys Ala Cys Cys
65 70

<210> 48

<211> 22

<212> PRT

<213> Conus bullatus

<220>

<221> PEPTIDE

<222> (1)..(22)

<223> Xaa at residue 5 is Glu or gamma-carboxy Glu; Xaa at residue 10 is Pro or Hyp; Xaa at residue 13 is Trp or bromo-Trp; Xaa at residue 12 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr

<400> 48

Arg Cys Cys Gly Xaa Gly Leu Thr Cys Xaa Arg Xaa Xaa Lys Asn Ser
1 5 10 15

Gln Ile Cys Ala Cys Cys
20

<210> 49
<211> 322
<212> DNA
<213> Conus bullatus

<400> 49
caagagggat cgatagcagt tcatgatgtc taaaactggga gtcttggta ccatctgtct 60
gcttcgtttt cccctttttg ctcttccgca ggatggagat caacctgcag accgacctgc 120
tgagcgtatg caggacgaca tttcatctga gcaggatccc ttgtttgttc agaaaagaag 180
gtgttgcggc gaaggcttga catgccccag atattggaaa aacagtcaga tttgtgcttg 240
ttgttaaatg acaacgtgtg atgaccaact tcggtatcac gactacgcca agtgtcta 300
gaataagtaa aacgattgca gt 322

<210> 50
<211> 74
<212> PRT
<213> Conus bullatus

<400> 50
Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
1 5 10 15
Pro Leu Phe Ala Leu Pro Gln Asp Gly Asp Gln Pro Ala Asp Arg Pro
20 25 30
Ala Glu Arg Met Gln Asp Asp Ile Ser Ser Glu Gln Asp Pro Leu Phe
35 40 45
Val Gln Lys Arg Arg Cys Cys Gly Glu Gly Leu Thr Cys Pro Arg Tyr
50 55 60
Trp Lys Asn Ser Gln Ile Cys Ala Cys Cys
65 70

<210> 51
<211> 22
<212> PRT
<213> Conus bullatus

<220>
<221> PEPTIDE
<222> (1)..(22)
<223> Xaa at residue 5 is Glu or gamma-carboxy Glu; Xaa at residue 10 is Pro or Hyp; Xaa at residue 13 is Trp or bromo-Trp; Xaa at residue 12 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr

<400> 51
Arg Cys Cys Gly Xaa Gly Leu Thr Cys Xaa Arg Xaa Xaa Lys Asn Ser
1 5 10 15

Gln Ile Cys Ala Cys Cys
20

<210> 52
<211> 238

<212> DNA
 <213> Conus capitaneus

<400> 52
 ggatccatga tgtctaaact gggagtcttg gtgaccatct gcctgcttct gtttcccctt 60
 gctgctttc cactggatgg aaatcaacct gcagaccacc ctgcaaagcg tacgcaagat 120
 gacagttcag ctgcctgtat caatacctgg attgatcatt cccattcttg ctgcaggac 180
 tgcggtgaag attgtgttgg ttgttgccgg taacgtgttg atgaccaact ttctcgag 238

<210> 53
 <211> 70
 <212> PRT
 <213> Conus capitaneus

<400> 53
 Gly Ser Met Met Ser Lys Leu Gly Val Leu Val Thr Ile Cys Leu Leu
 1 5 10 15

Leu Phe Pro Leu Ala Ala Phe Pro Leu Asp Gly Asn Gln Pro Ala Asp
 20 25 30

His Pro Ala Lys Arg Thr Gln Asp Asp Ser Ser Ala Ala Leu Ile Asn
 35 40 45

Thr Trp Ile Asp His Ser His Ser Cys Cys Arg Asp Cys Gly Glu Asp
 50 55 60

Cys Val Gly Cys Cys Arg
 65 70

<210> 54
 <211> 15
 <212> PRT
 <213> Conus capitaneus

<220>
 <221> PEPTIDE
 <222> (1)..(15)
 <223> Xaa at residue 8 is Glu or gamma-carboxy Glu

<400> 54
 Ser Cys Cys Arg Asp Cys Gly Xaa Asp Cys Val Gly Cys Cys Arg
 1 5 10 15

<210> 55
 <211> 323
 <212> DNA
 <213> Conus characteristicus

<400> 55
 caagagggat cgatagcagt tcatgatgtc taaaactggga gtcttggta ccatctgtct 60
 gcttctgttt ccccttactg ctcttccaaat ggatggagat caacctgcag accaacctgc 120
 agatcgtatg caggacgaca tttcatctga gcagtatccc ttgtttgata tgagaaaaag 180
 gtgttgcggc cccggcgggtt catgccccgt atatccaga gacaattta tttgtggtg 240
 ttgttaaatg acaacgtgtc gatgaccaac ttcattatca cgactacgcc aagtgtctaa 300
 tgaataagta aaatgattgc agt 323

<210> 56
 <211> 74
 <212> PRT
 <213> Conus characteristicus

<400> 56
 Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
 1 5 10 15

Pro Leu Thr Ala Leu Pro Met Asp Gly Asp Gln Pro Ala Asp Gln Pro
 20 25 30

Ala Asp Arg Met Gln Asp Asp Ile Ser Ser Glu Gln Tyr Pro Leu Phe
 35 40 45

Asp Met Arg Lys Arg Cys Cys Gly Pro Gly Gly Ser Cys Pro Val Tyr
 50 55 60

Phe Arg Asp Asn Phe Ile Cys Gly Cys Cys
 65 70

<210> 57
 <211> 21
 <212> PRT
 <213> Conus characteristicus

<220>
 <221> PEPTIDE
 <222> (1)..(21)
 <223> Xaa at residue 4 and 9 is Pro or Hyp; Xaa at residue 11 is Tyr, 1
 25I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Ty
 r

<400> 57
 Cys Cys Gly Xaa Gly Gly Ser Cys Xaa Val Xaa Phe Arg Asp Asn Phe
 1 5 10 15

Ile Cys Gly Cys Cys
 20

<210> 58
 <211> 316
 <212> DNA
 <213> Conus characteristicus

<400> 58
 caagaggat cgatagcagt tcatgatgtc taaactggga gtcttggta ccatctgtct 60
 gcttctgttt ccccttactg ctcttccgat ggatggagat gaacctgcaa accgacctgt 120
 cgagcgtatg caggacaaca tttcatctga gcagttccc ttgtttgaga agagacgaga 180
 ttgttgcact ccgcgaaga aatgcaaaga ccgacaatgc aaacccaga gatgttgcgc 240
 tggacgataa cgtgttgcgtt accaacttta tcacggctac gtcaagtgtt tagtgaataa 300
 gtaaaatgat tgcagt 316

<210> 59
 <211> 75
 <212> PRT
 <213> Conus characteristicus

<400> 59
 Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
 1 5 10 15

Pro Leu Thr Ala Leu Pro Met Asp Gly Asp Glu Pro Ala Asn Arg Pro
 20 25 30

Val Glu Arg Met Gln Asp Asn Ile Ser Ser Glu Gln Tyr Pro Leu Phe
 35 40 45

Glu Lys Arg Arg Asp Cys Cys Thr Pro Pro Lys Lys Cys Lys Asp Arg
 50 55 60

Gln Cys Lys Pro Gln Arg Cys Cys Ala Gly Arg
 65 70 75

<210> 60

<211> 22

<212> PRT

<213> Conus characteristicus

<220>

<221> PEPTIDE

<222> (1)..(22)

<223> Xaa at residue 6, 7 and 17 is Pro or Hyp

<400> 60

Arg Asp Cys Cys Thr Xaa Xaa Lys Lys Cys Lys Asp Arg Gln Cys Lys
 1 5 10 15

Xaa Gln Arg Cys Cys Ala
 20

<210> 61

<211> 314

<212> DNA

<213> Conus characteristicus

<400> 61

caagagggat cgatagcagt tcatgatgtc taaactggga gtcttggta ccatctgtct 60

gcttcgttt ccccttactg ctcttccact ggtggagat caacctgcag atcaatctgc 120

agagcgacct gcagagcgta cgcaggacga cattcagcag catccgttat atgatccgaa 180

aagaaggtgt tgccgttac catgccccga cagctgccac ggatcttgct gctataagt 240

ataacatgtt gatggccagc tttgttatca cggccacgta aagtgtctta atgaataagt 300

aaaacgattt cagt 314

<210> 62

<211> 72

<212> PRT

<213> Conus characteristicus

<400> 62

Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
 1 5 10 15

Pro Leu Thr Ala Leu Pro Leu Asp Gly Asp Gln Pro Ala Asp Gln Ser
 20 25 30

Ala Glu Arg Pro Ala Glu Arg Thr Gln Asp Asp Ile Gln Gln His Pro
 35 40 45

Leu Tyr Asp Pro Lys Arg Arg Cys Cys Arg Tyr Pro Cys Pro Asp Ser

50	55	60
----	----	----

Cys His Gly Ser Cys Cys Tyr Lys
 65 70

<210> 63
 <211> 18
 <212> PRT
 <213> Conus characteristicus

<220>
 <221> PEPTIDE
 <222> (1)..(18)
 <223> Xaa at residue 6 and 8 is Pro or Hyp; Xaa at residue 5 and 17 is
 Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phos
 pho-Tyr

<400> 63
 Arg Cys Cys Arg Xaa Xaa Cys Xaa Asp Ser Cys His Gly Ser Cys Cys
 1 5 10 15

Xaa Lys

<210> 64
 <211> 292
 <212> DNA
 <213> Conus characteristicus

<400> 64
 caagaggat cgatacgagt tcatgatgtc taaactggga gccttgttga ccatctgtct 60
 acttctgtt tcccttactg ctgttccgct gcatggagat caacatgcag accaacacctgc 120
 acagcgtctg caggaccgca ttccaactga agatcatccc ttatttgatc ccaacaaacg 180
 gtgttgcggc ccggtggcat gcaacatggg atgcaagcct tggtgtggat gaccagctt 240
 gttatcgccg tcttcatgaa gtgtcttaat gaataagtaa aatgattgca gt 292

<210> 65
 <211> 69
 <212> PRT
 <213> Conus characteristicus

<400> 65
 Met Met Ser Lys Leu Gly Ala Leu Leu Thr Ile Cys Leu Leu Leu Phe
 1 5 10 15

Ser Leu Thr Ala Val Pro Leu Asp Gly Asp Gln His Ala Asp Gln Pro
 20 25 30

Ala Gln Arg Leu Gln Asp Arg Ile Pro Thr Glu Asp His Pro Leu Phe
 35 40 45

Asp Pro Asn Lys Arg Cys Cys Pro Pro Val Ala Cys Asn Met Gly Cys
 50 55 60

Lys Pro Cys Cys Gly
 65

<210> 66
 <211> 15
 <212> PRT
 <213> Conus characteristicus

<220>
 <221> PEPTIDE
 <222> (1)..(15)
 <223> Xaa at residue 3, 4 and 13 is Pro or Hyp

<400> 66
 Cys Cys Xaa Xaa Val Ala Cys Asn Met Gly Cys Lys Xaa Cys Cys
 1 5 10 15

<210> 67
 <211> 293
 <212> DNA
 <213> Conus characteristicus

<400> 67
 caagaggat cgatacgagt tcatgatgtc taaactggga gccttggta ccatctgtct 60
 acttctgtt tccctaactg ctgttccgct ggatggagat caacatgcag accaacctgc 120
 agagcgtctg catgaccgc ttccaactga aaatcatccc ttatatgatc ccgtcaaaacg 180
 gtgttgcgat gattcggaat gcgactattc ttgctggcct tgctgtatgt ttggataacc 240
 tttgttatcg cggcctcatc aagtgtctaa tgaataagta aaacgattgc agt 293

<210> 68
 <211> 71
 <212> PRT
 <213> Conus characteristicus

<400> 68
 Met Met Ser Lys Leu Gly Ala Leu Leu Thr Ile Cys Leu Leu Leu Phe
 1 5 10 15

Ser Leu Thr Ala Val Pro Leu Asp Gly Asp Gln His Ala Asp Gln Pro
 20 25 30

Ala Glu Arg Leu His Asp Arg Leu Pro Thr Glu Asn His Pro Leu Tyr
 35 40 45

Asp Pro Val Lys Arg Cys Cys Asp Asp Ser Glu Cys Asp Tyr Ser Cys
 50 55 60

Trp Pro Cys Cys Met Phe Gly
 65 70

<210> 69
 <211> 17
 <212> PRT
 <213> Conus characteristicus

<220>
 <221> PEPTIDE
 <222> (1)..(17)
 <223> Xaa at residue 6 is Glu or gamma-carboxy Glu; Xaa at residue 13 is Pro or Hyp; Xaa at residue 12 is Trp or bromo-Trp; Xaa at residue 9 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr

<400> 69
 Cys Cys Asp Asp Ser Xaa Cys Asp Xaa Ser Cys Xaa Xaa Cys Cys Met
 1 5 10 15

Phe

<210> 70
 <211> 232
 <212> DNA
 <213> Conus characteristicus

<400> 70
 ggatccatga tgtctaaact gggagtcttg ttgaccatct gtctgcttct gtttcccctt 60
 actgctgttc cgctggatgg agatcaacct gcagaccgac ctgcagagcg taagcaggac 120
 gtttcatctg aacagcatcc cttctttgat cccgtcaaac ggtgttgccg ccgggtttac 180
 atgggatgca tcccttgttg ctttaacgt gttgatgacc aactttctcg ag 232

<210> 71
 <211> 68
 <212> PRT
 <213> Conus characteristicus

<400> 71
 Gly Ser Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu
 1 5 10 15

Leu Phe Pro Leu Thr Ala Val Pro Leu Asp Gly Asp Gln Pro Ala Asp
 20 25 30

Arg Pro Ala Glu Arg Lys Gln Asp Val Ser Ser Glu Gln His Pro Phe
 35 40 45

Phe Asp Pro Val Lys Arg Cys Cys Arg Arg Cys Tyr Met Gly Cys Ile
 50 55 60

Pro Cys Cys Phe
 65

<210> 72
 <211> 14
 <212> PRT
 <213> Conus characteristicus

<220>
 <221> PEPTIDE
 <222> (1)..(14)
 <223> Xaa at residue 11 is Pro or Hyp; Xaa at residue 6 is Tyr, 125I-Ty
 r, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr

<400> 72
 Cys Cys Arg Arg Cys Xaa Met Gly Cys Ile Xaa Cys Cys Phe
 1 5 10

<210> 73
 <211> 323
 <212> DNA
 <213> Conus circumcisus

<400> 73
 caagaaggat cgatagcagt tcatgatgtc taaaactgggg gtattgttga ccatctgtct 60
 gcttctgttt ccccttactg ctcttccaat ggatggagat caacctgcag accaacctgc 120
 agatcgtatg caggacgaca tttcatctga gcagttatccc ttgtttgata agagacgaaa 180
 gtgttgcggc aaagacgggc catgccccaa atatttcaaa gacaatttta tttgtggttg 240
 ttgttaaatg acaacgtgtc gatgaccaac ttcgttatca cgattcgcca agtgtctaa 300

tgaataagta aatgattgc agt 323

<210> 74
<211> 74
<212> PRT
<213> Conus circumcisus

<400> 74
Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Phe
1 5 10 15

Pro Leu Thr Ala Leu Pro Met Asp Gly Asp Gln Pro Ala Asp Gln Pro
20 25 30

Ala Asp Arg Met Gln Asp Asp Ile Ser Ser Glu Gln Tyr Pro Leu Phe
35 40 45

Asp Lys Arg Arg Lys Cys Cys Gly Lys Asp Gly Pro Cys Pro Lys Tyr
50 55 60

Phe Lys Asp Asn Phe Ile Cys Gly Cys Cys
65 70

<210> 75
<211> 23
<212> PRT
<213> Conus circumcisus

<220>
<221> PEPTIDE
<222> (1)..(23)
<223> Xaa at residue 9 and 11 is Pro or Hyp; Xaa at residue 13 is Tyr,
125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-T
yr

<400> 75
Arg Lys Cys Cys Gly Lys Asp Gly Xaa Cys Xaa Lys Xaa Phe Lys Asp
1 5 10 15

Asn Phe Ile Cys Gly Cys Cys
20

<210> 76
<211> 293
<212> DNA
<213> Conus dalli

<400> 76
caagaggat cgatagcagt tcatgatgtc taaactggga gccttggta ccatctgtct 60
acttctgttt tcccttaactg ctgttccgct ggatggagat caacatgcag accaacctgc
agagcgtctg caggaccgccc ttccaactga aaatcatccc ttatatgatc ccgtcaaacg
gtgttgcgt gattcggat gcgactattc ttgctggcct tgctgtattt tatcataacc
tttgttatcg cggcctcatc aagtgtcaaa tgaataagta aaatgattgc agt 120
240
293

<210> 77
<211> 71
<212> PRT
<213> Conus dalli

<400> 77

Met Met Ser Lys Leu Gly Ala Leu Leu Thr Ile Cys Leu Leu Leu Phe
 1 5 10 15

Ser Leu Thr Ala Val Pro Leu Asp Gly Asp Gln His Ala Asp Gln Pro
 20 25 30

Ala Glu Arg Leu Gln Asp Arg Leu Pro Thr Glu Asn His Pro Leu Tyr
 35 40 45

Asp Pro Val Lys Arg Cys Cys Asp Asp Ser Glu Cys Asp Tyr Ser Cys
 50 55 60

Trp Pro Cys Cys Ile Leu Ser
 65 70

<210> 78
 <211> 18
 <212> PRT
 <213> Conus dalli

<220>
 <221> PEPTIDE
 <222> (1)..(18)
 <223> Xaa at residue 6 is Glu or gamma-carboxy Glu; Xaa at residue 13 is Pro or Hyp; Xaa at residue 12 is Trp or bromo-Trp; Xaa at residue 9 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr

<400> 78
 Cys Cys Asp Asp Ser Xaa Cys Asp Xaa Ser Cys Xaa Xaa Cys Cys Ile
 1 5 10 15

Leu Ser

<210> 79
 <211> 299
 <212> DNA
 <213> Conus dalli

<400> 79
 caagagggat cgatacgagt tcatgatgtc taaaactggga gtcttggta ccattttgtct 60
 actttctgtt ccccttactg ctgttccact ggttggagat cagcctgcag accgacactgc 120
 agagcgtatg caggacggca tttcatctga acatcatcca ttttttgatt ccgtcaaaaa 180
 gaaacaacag tggccgc cggtggc atg caacatggga tgcgagcctt gttgtggatg 240
 accagcttg ttatcgccgc tcatgaagtg tcctaatgaa taagtaaaac gattgcagt 299

<210> 80
 <211> 72
 <212> PRT
 <213> Conus dalli

<400> 80
 Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
 1 5 10 15

Pro Leu Thr Ala Val Pro Leu Asp Gly Asp Gln Pro Ala Asp Arg Pro
 20 25 30

Ala Glu Arg Met Gln Asp Gly Ile Ser Ser Glu His His Pro Phe Phe
 35 40 45

Asp Ser Val Lys Lys Gln Gln Cys Cys Pro Pro Val Ala Cys Asn
 50 55 60

Met Gly Cys Glu Pro Cys Cys Gly
 65 70

<210> 81
 <211> 17
 <212> PRT
 <213> Conus dalli

<220>
 <221> PEPTIDE
 <222> (1)..(17)
 <223> Xaa at residue 1 is Gln or pyro-Glu; Xaa at residue 14 is Glu or
 gamma-carboxy Glu; Xaa at residue 5, 6 and 15 is Pro or Hyp

<400> 81
 Xaa Gln Cys Cys Xaa Xaa Val Ala Cys Asn Met Gly Cys Xaa Xaa Cys
 1 5 10 15

Cys

<210> 82
 <211> 290
 <212> DNA
 <213> Conus dalli

<400> 82
 caagaaggat cgatagcagt tcatgatgtc taaactggga gtcttgttga tcataatgtct 60
 atttctgttt ccccttactg ctgttcagct caatggagat cagcctgcag accaatctgc 120
 agagcgtatg caggacaaaaa tttcatctga acatcatccc tttttgtatc ccgtcaaacg 180
 ttgttgcAAC gcggggTTT gcccgttcgg atgcacgcct tgTTgttggT gaccagctt 240
 gttatcgccg cctcatcaag tgtctaattga ataagtaaaa tgattgcagt 290

<210> 83
 <211> 69
 <212> PRT
 <213> Conus dalli
 <400> 83
 Met Met Ser Lys Leu Gly Val Leu Leu Ile Ile Cys Leu Phe Leu Phe
 1 5 10 15

Pro Leu Thr Ala Val Gln Leu Asn Gly Asp Gln Pro Ala Asp Gln Ser
 20 25 30

Ala Glu Arg Met Gln Asp Lys Ile Ser Ser Glu His His Pro Phe Phe
 35 40 45

Asp Pro Val Lys Arg Cys Cys Asn Ala Gly Phe Cys Arg Phe Gly Cys
 50 55 60

Thr Pro Cys Cys Trp
 65

<210> 84
 <211> 16
 <212> PRT
 <213> Conus dalli

<220>
 <221> PEPTIDE
 <222> (1)..(16)
 <223> Xaa at residue 13 is Pro or Hyp; Xaa at residue 16 is Trp or brom
 o-Trp

<400> 84
 Cys Cys Asn Ala Gly Phe Cys Arg Phe Gly Cys Thr Xaa Cys Cys Xaa
 1 5 10 15

<210> 85
 <211> 288
 <212> DNA
 <213> Conus distans

<400> 85
 caagagggtt cgatagcagt tcatgatgatc taaactggga gtcttgctga ccatctttct 60
 gcttctgttt ccccttactg ctgttccgct ggatggagat caacccgcag acggacttgc 120
 agagcgcattt caggacgaca gttcagctgc actgattaga gactggcttc ttcaaaacccg 180
 acagtgttgtt gtgcattccat gccccatgcac gccttgctgtt agatgaccag ctttgtcatc 240
 gcggctacgtt caagtatcta atgaataagt aagtaaaacg attgcagt 288

<210> 86
 <211> 67
 <212> PRT
 <213> Conus distans

<400> 86
 Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Phe Leu Leu Leu Phe
 1 5 10 15

Pro Leu Thr Ala Val Pro Leu Asp Gly Asp Gln Pro Ala Asp Gly Leu
 20 25 30

Ala Glu Arg Met Gln Asp Asp Ser Ser Ala Ala Leu Ile Arg Asp Trp
 35 40 45

Leu Leu Gln Thr Arg Gln Cys Cys Val His Pro Cys Pro Cys Thr Pro
 50 55 60

Cys Cys Arg
 65

<210> 87
 <211> 14
 <212> PRT
 <213> Conus distans

<220>
 <221> PEPTIDE
 <222> (1)..(14)
 <223> Xaa at residue 1 is Gln or pyro-Glu; Xaa at residue 6, 8 and 11 i
 s Pro or Hyp

<400> 87
 Xaa Cys Cys Val His Xaa Cys Xaa Cys Thr Xaa Cys Cys Arg
 1 5 10

<210> 88
 <211> 303
 <212> DNA
 <213> Conus ermineus

<400> 88
 acctcaagag ggatcgatcg cagttcatga tgtctaaact gggagccttg ttgaccatct 60
 gtctgcttct gtttcccatt actgctcttc tcatggatgg agatcagcct gcagaccgac 120
 ctgcagagcg tacggaggat gacatttcat ctgactacat tccctgttgc agttggccat 180
 gcccccgata ctccaaacggt aaacttggttt gtttttggatggatga taatgtgttg 240
 atgaccaact ttgttatcac ggctacgtca agtgtctact gaataagtaa aatgattgca 300
 gta 303

<210> 89
 <211> 67
 <212> PRT
 <213> Conus ermineus

<400> 89
 Met Met Ser Lys Leu Gly Ala Leu Leu Thr Ile Cys Leu Leu Leu Phe
 1 5 10 15

Pro Ile Thr Ala Leu Leu Met Asp Gly Asp Gln Pro Ala Asp Arg Pro
 20 25 30

Ala Glu Arg Thr Glu Asp Asp Ile Ser Ser Asp Tyr Ile Pro Cys Cys
 35 40 45

Ser Trp Pro Cys Pro Arg Tyr Ser Asn Gly Lys Leu Val Cys Phe Cys
 50 55 60

Cys Leu Gly
 65

<210> 90
 <211> 20
 <212> PRT
 <213> Conus ermineus

<220>
 <221> PEPTIDE
 <222> (1)..(20)
 <223> Xaa at residue 5 and 7 is Pro or Hyp; Xaa at residue 4 is Trp or
 bromo-Trp; Xaa at residue 9 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr,
 O-sulpho-Tyr or O-phospho-Tyr

<400> 90
 Cys Cys Ser Xaa Xaa Cys Xaa Arg Xaa Ser Asn Gly Lys Leu Val Cys
 1 5 10 15

Phe Cys Cys Leu
 20

<210> 91
 <211> 241
 <212> DNA
 <213> Conus generalis

<400> 91
 ggatccatga tgtctaaact gggagtccttg ttgaccatct gtctggttct gtttcccctt 60
 actgctcttc cactggatgg agaacaacct gtagaccgac atgccgagca tatgcaggat 120
 gacaattcag ctgcacagaa cccctgggtt attgccatca gacagtgttg cacgttctgc 180

aactttggat gccaaccttg ttgcctcacc tgataacgtg ttgatgacca actttctcga 240
 g 241
 <210> 92
 <211> 70
 <212> PRT
 <213> Conus generalis

<400> 92
 Gly Ser Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Val
 1 5 10 15

Leu Phe Pro Leu Thr Ala Leu Pro Leu Asp Gly Glu Gln Pro Val Asp
 20 25 30

Arg His Ala Glu His Met Gln Asp Asp Asn Ser Ala Ala Gln Asn Pro
 35 40 45

Trp Val Ile Ala Ile Arg Gln Cys Cys Thr Phe Cys Asn Phe Gly Cys
 50 55 60

Gln Pro Cys Cys Leu Thr
 65 70

<210> 93
 <211> 16
 <212> PRT
 <213> Conus generalis

<220>
 <221> PEPTIDE
 <222> (1)...(16)
 <223> Xaa at residue 1 is Gln or pyro-Glu; Xaa at residue 12 is Pro or
 Hyp

<400> 93
 Xaa Cys Cys Thr Phe Cys Asn Phe Gly Cys Gln Xaa Cys Cys Leu Thr
 1 5 10 15

<210> 94
 <211> 241
 <212> DNA
 <213> Conus generalis

<400> 94
 ggatccatga tgtctaaact gggagtcttg ttgaccatct gtctggttct gtttccccctt 60
 actgctcttc cactggatgg agaacaacct gtagaccgac atgccgagca tatgcaggat 120
 gacaattcag ctgcacagaa cccctgggtt attgccatca gacagtgttg cacgttctgc 180
 aactttggat gccagccttg ttgcgtcccc tgataacgtg ttgatgacca actttctcga 240
 g 241

<210> 95
 <211> 70
 <212> PRT
 <213> Conus generalis

<400> 95
 Gly Ser Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Val
 1 5 10 15

Leu Phe Pro Leu Thr Ala Leu Pro Leu Asp Gly Glu Gln Pro Val Asp
 20 25 30

Arg His Ala Glu His Met Gln Asp Asp Asn Ser Ala Ala Gln Asn Pro
 35 40 45

Trp Val Ile Ala Ile Arg Gln Cys Cys Thr Phe Cys Asn Phe Gly Cys
 50 55 60

Gln Pro Cys Cys Val Pro
 65 70

<210> 96
 <211> 16
 <212> PRT
 <213> Conus generalis

<220>
 <221> PEPTIDE
 <222> (1)...(16)
 <223> Xaa at residue 1 is Gln or pyro-Glu; Xaa at residue 12 and 16 is Pro or Hyp

<400> 96
 Xaa Cys Cys Thr Phe Cys Asn Phe Gly Cys Gln Xaa Cys Cys Val Xaa
 1 5 10 15

<210> 97
 <211> 862
 <212> DNA
 <213> Conus geographus

<400> 97
 gtcgactcta gaggatccga caacaaagag tcaaccccac tgccacgtca agagcgaagc 60
 gccacagcta agacaagagg gatcgatagc agttcatgat gtctaaactg ggagtcttgt 120
 tgaccatctg tctgcttctg tttccctta ctgctttcc gatggatgga gatgaacctg 180
 caaaccgacc tgcgagcgt atgcaggaca acatttcatc tgagcagtat cccttgtttg 240
 agaagagacg agattgtgc actccgcccga agaaatgcaa agaccgacaa tgcaaacc 300
 agagatgtg cgctggacga taacgtgttgc atgaccaact ttatcacggc tacgtcaagt 360
 gtttagtcaa taagtaaaat gattgcagtc ttgctcagat ttgctttgt gttttggct 420
 aaagatcaat gaccaaaccg ttgtttgat gcggattgtc atatatttct cgattccaat 480
 ccaacactag atgatttaat cacgatagat taatttcttca tcaatgcctt gatTTTcgt 540
 ctgtcatatc agttttgttt atatttattt tttcgtcact gtctacacaa acgcatgcat 600
 gcacgcacatgc acgcacacac gcacgcacgc tcgcacaaac atgcgcgcgc acgcacacac 660
 acacacacac acacaaacac acacacaagc aatcacacaa ttattgacat tatttattt 720
 ttcattgatg tatttggat tcgtttgctt gtttttagaa tagtttgagg ccgtctttt 780
 ggattttattt gaactgctt attgtatacg agtacttcgt gctttgaaac actgctgaaa 840
 ataaaacaaa cactgacgta gc 862

<210> 98

<211> 75
 <212> PRT
 <213> Conus geographus

<400> 98
 Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
 1 5 10 15

Pro Leu Thr Ala Leu Pro Met Asp Gly Asp Glu Pro Ala Asn Arg Pro
 20 25 30

Val Glu Arg Met Gln Asp Asn Ile Ser Ser Glu Gln Tyr Pro Leu Phe
 35 40 45

Glu Lys Arg Arg Asp Cys Cys Thr Pro Pro Lys Lys Cys Lys Asp Arg
 50 55 60

Gln Cys Lys Pro Gln Arg Cys Cys Ala Gly Arg
 65 70 75

<210> 99
 <211> 22
 <212> PRT
 <213> Conus geographus

<220>
 <221> PEPTIDE
 <222> (1)..(22)
 <223> Xaa at residue 6, 7 and 17 is Pro or Hyp

<400> 99
 Arg Asp Cys Cys Thr Xaa Xaa Lys Lys Cys Lys Asp Arg Gln Cys Lys
 1 5 10 15

Xaa Gln Arg Cys Cys Ala
 20

<210> 100
 <211> 860
 <212> DNA
 <213> Conus geographus

<400> 100
 ggccagacga caacaaagag tcaaccccac tgccacgtca agagcgaagc gccacagcta 60
 agacaagagg gatcgatagc agttcatgtat gtctaaactg ggagtcttgt tgaccatctg
 tctgcttctg tttcccccta ctgctttcc gatggatgga gatgaacctg caaaccgacc 120
 tgcgagcgt atgcaggaca acatttcata tgagcagtat cccttgtttg agaagagacg
 agattgttgc actccgcccga ggaaatgcaa agaccgacga tgcaaaccga taaaatgttg 180
 cgctggacga taacgtgttgc atgaccaact ttatcacggc tagctcagtg ttttagtgaat
 aagtaaaatg attgcagtct tgctcagatt gctttgtgt tttggtctaa gatcaatgac 240
 caaaccgttg ttttgcgtcg gattgtcata tatttctcga ttccaaatcca acactagatg
 atttaatcac gatagattaa ttttctatca atgccttgat tttcgtctg tcataatcagt 300
 tttgtttata ttatgtttt cgtcactgtc tacacaaacg catgcgtgca cgcgtgcacg 360
 cacacacgca cgcacgctcg cacaaacatg cgcgcgcacg cacacacaca cacacacaca 420
 480
 540
 600
 660

aacacacaca cgaagcaatc acacaattag ttgacattat ttatatttc attgatgtat 720
ttgttattcg tttgcttgtt tttagaatag tttgaggccg tcttttgaa tttatggaa 780
ctgctttatt gtatacgagt acttcgtgct ttgaaacact gctgaaaata aaacaaacac 840
tgacgttagca aaaaaaaaaa 860

<210> 101
<211> 75
<212> PRT
<213> Conus geographus

<400> 101
Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
1 5 10 15

Pro Leu Thr Ala Leu Pro Met Asp Gly Asp Glu Pro Ala Asn Arg Pro
20 25 30

Val Glu Arg Met Gln Asp Asn Ile Ser Ser Glu Gln Tyr Pro Leu Phe
35 40 45

Glu Lys Arg Arg Asp Cys Cys Thr Pro Pro Arg Lys Cys Lys Asp Arg
50 55 60

Arg Cys Lys Pro Met Lys Cys Cys Ala Gly Arg
65 70 75

<210> 102
<211> 22
<212> PRT
<213> Conus geographus

<220>
<221> PEPTIDE
<222> (1)..(22)
<223> Xaa at residue 6, 7 and 17 is Pro or Hyp
<400> 102
Arg Asp Cys Cys Thr Xaa Xaa Arg Lys Cys Lys Asp Arg Arg Cys Lys
1 5 10 15

Xaa Met Lys Cys Cys Ala
20

<210> 103
<211> 22
<212> PRT
<213> Conus geographus

<220>
<221> PEPTIDE
<222> (1)..(22)
<223> Xaa at residue 6, 7 and 17 is Pro or Hyp
<400> 103
Arg Asp Cys Cys Thr Xaa Xaa Lys Lys Cys Lys Asp Arg Arg Cys Lys
1 5 10 15

Xaa Leu Lys Cys Cys Ala
20

<210> 104
<211> 321
<212> DNA

<213> Conus gloriamaris

<400> 104

ctcactatacg aattcgagc tcggcacacg ggatcgatag cagttcatga tgtctaaact 60
 gggagccttg ttgaccatct gtctacttct gtttcccta actgctgttc cgctggatgg 120
 agatcaacat gcagaccaac ctgcagagcg tctgcatgac cgccttccaa ctgaaaatca 180
 tcccttataat gatcccgtca aacggtggtt cgatgattcg gaatgcgact attcttgctg 240
 gccttgctgt atgtttggat aaccttgg 300
 agtaaaaacga ttgcagtagg c 321

<210> 105

<211> 71

<212> PRT

<213> Conus gloriamaris

<400> 105

Met Met Ser Lys Leu Gly Ala Leu Leu Thr Ile Cys Leu Leu Phe
 1 5 10 15

Ser Leu Thr Ala Val Pro Leu Asp Gly Asp Gln His Ala Asp Gln Pro
 20 25 30

Ala Glu Arg Leu His Asp Arg Leu Pro Thr Glu Asn His Pro Leu Tyr
 35 40 45

Asp Pro Val Lys Arg Cys Cys Asp Asp Ser Glu Cys Asp Tyr Ser Cys
 50 55 60

Trp Pro Cys Cys Met Phe Gly
 65 70

<210> 106

<211> 17

<212> PRT

<213> Conus gloriamaris

<220>

<221> PEPTIDE

<222> (1)..(17)

<223> Xaa at residue 6 Glu or gamma-carboxy Glu; Xaa at residue 13 is Pro or Hyp; Xaa at residue 12 is Trp or bromo-Trp; Xaa at residue 9 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr

<400> 106

Cys Cys Asp Asp Ser Xaa Cys Asp Xaa Ser Cys Xaa Xaa Cys Cys Met
 1 5 10 15

Phe

<210> 107

<211> 257

<212> DNA

<213> Conus gloriamaris

<400> 107

gttcatgatg tctaaactgg gagtcttggt gatcatctgt ctacttctgt ttccccttac 60

tgctgttccg ctggatggag atcaacctgc agaccgatat gcagagcgta tgcaggacga 120

catttcatct gaacatcatc ccatgttga tgccgtcaga ggggtttgcc atctgttggc 180
 atgccgccttc ggatgctcgc cttgttggc gtgatcagct ttgttatcgc gcctcatca 240
 agtgactcta atgcaaa 257

<210> 108
 <211> 69
 <212> PRT
 <213> Conus gloriamaris

<400> 108
 Met Met Ser Lys Leu Gly Val Leu Leu Ile Ile Cys Leu Leu Leu Phe
 1 5 10 15

Pro Leu Thr Ala Val Pro Leu Asp Gly Asp Gln Pro Ala Asp Arg Tyr
 20 25 30

Ala Glu Arg Met Gln Asp Asp Ile Ser Ser Glu His His Pro Met Phe
 35 40 45

Asp Ala Val Arg Gly Cys Cys His Leu Leu Ala Cys Arg Phe Gly Cys
 50 55 60

Ser Pro Cys Cys Trp
 65

<210> 109
 <211> 17
 <212> PRT
 <213> Conus gloriamaris

<220>
 <221> PEPTIDE
 <222> (1)..(17)
 <223> Xaa at residue 14 is Pro or Hyp; Xaa at residue 17 is Trp or brom
 o-Trp

<400> 109
 Gly Cys Cys His Leu Leu Ala Cys Arg Phe Gly Cys Ser Xaa Cys Cys
 1 5 10 15

Xaa

<210> 110
 <211> 471
 <212> DNA
 <213> Conus gloriamaris

<400> 110
 gagacgacaa ggaacagtca accccacagc cacgccaaga gcagacagcc acagctacgt 60
 gaagaagggt ggagagaggt tcgtgtgtt gaaaatggga gtgggtctat tcattttcct 120
 ggtactgtt cccctggcaa cgctccagct ggatgcagat caacctgttag aacgatatgc 180
 ggagaacaaa cagctcctca acccagatga aaggaggaa atcatattgc atgctctggg 240
 gacgcgatgc ttttttttttggg atgtgtgcga ccacccgagt tgtacttgct gggcggtt 300
 ggcggacaaca tccatggcgc tttttatcc aacaacgaca gcgtttgtt 360
 atttcatgtt ttcattgcgc cacgtctttt gtctaaat gacgaacatg attgcactct 420
 ggttcagatt tcgtgttctt ttctgacaat aaatgacaaa actccaaaaa a 471

<210> 111
 <211> 71
 <212> PRT
 <213> Conus gloriamaris

<400> 111
 Met Leu Lys Met Gly Val Val Leu Phe Ile Phe Leu Val Leu Phe Pro
 1 5 10 15

Leu Ala Thr Leu Gln Leu Asp Ala Asp Gln Pro Val Glu Arg Tyr Ala
 20 25 30

Glu Asn Lys Gln Leu Leu Asn Pro Asp Glu Arg Arg Glu Ile Ile Leu
 35 40 45

His Ala Leu Gly Thr Arg Cys Cys Ser Trp Asp Val Cys Asp His Pro
 50 55 60

Ser Cys Thr Cys Cys Gly Gly
 65 70

<210> 112
 <211> 16
 <212> PRT
 <213> Conus gloriamaris

<220>
 <221> PEPTIDE
 <222> (1)..(16)
 <223> Xaa at residue 10 is Pro or Hyp; Xaa at residue 4 is Trp or bromo
 -Trp

<400> 112
 Cys Cys Ser Xaa Asp Val Cys Asp His Xaa Ser Cys Thr Cys Cys Gly
 1 5 10 15

<210> 113
 <211> 304
 <212> DNA
 <213> Conus laterculatus

<400> 113
 cgacctcaag aaggatcgat agcagttcat gatgtctaaa ctgggagtct tggaccat 60
 ctgtctgctt ctgtttcccc ttactgctct tccgatggat ggagatcaac ctgcagaccc 120
 acctgcagag cgtatgcagg acgtttcatc tgaacagcat cccttgtatg atcccgtaa 180
 acgggtttgc gactggccat gcagcggatg catcccttgt tgctaatagt aacaacgtgt 240
 tgataaccaa ctttcttacc acgactacgt caagtgtcta atgaataagt aaaatgattg 300
 cagt 304

<210> 114
 <211> 65
 <212> PRT
 <213> Conus laterculatus

<400> 114
 Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Phe
 1 5 10 15

Pro Leu Thr Ala Leu Pro Met Asp Gly Asp Gln Pro Ala Asp Arg Pro

20

25

30

Ala Glu Arg Met Gln Asp Val Ser Ser Glu Gln His Pro Leu Tyr Asp
 35 40 45

Pro Val Lys Arg Cys Cys Asp Trp Pro Cys Ser Gly Cys Ile Pro Cys
 50 55 60

Cys
 65

<210> 115
 <211> 13
 <212> PRT
 <213> Conus laterculatus

<220>
 <221> PEPTIDE
 <222> (1)..(13)
 <223> Xaa at residue 5 and 11 is Pro or Hyp; Xaa at residue 4 is Trp or
 bromo-Trp

<400> 115
 Cys Cys Asp Xaa Xaa Cys Ser Gly Cys Ile Xaa Cys Cys
 1 5 10

<210> 116
 <211> 313
 <212> DNA
 <213> Conus laterculatus

<400> 116
 cgacctcaag aaggatcgat agcagttcat gatgtctaaa ctgggagtct tggaccat 60
 ctgtctgctt ctgtttcccc ttactgctct ggatggagat caacctgcag accgacttgc 120
 agagcgtatg caggacgaca tttcatctga gcagcatccc tttgaaaaga gacgagactg 180
 ttgcacacct ccgaagaaat gcagagaccg acaatgcaaa cctgcacggtt gttgcggagg 240
 ataacgtgtt gatgaccaac tttgttatca cggctacgtc aagtgtctag tgaataagta 300
 aaacgattgc agt 313

<210> 117
 <211> 71
 <212> PRT
 <213> Conus laterculatus

<400> 117
 Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
 1 5 10 15

Pro Leu Thr Ala Leu Asp Gly Asp Gln Pro Ala Asp Arg Leu Ala Glu
 20 25 30

Arg Met Gln Asp Asp Ile Ser Ser Glu Gln His Pro Phe Glu Lys Arg
 35 40 45

Arg Asp Cys Cys Thr Pro Pro Lys Lys Cys Arg Asp Arg Gln Cys Lys
 50 55 60

Pro Ala Arg Cys Cys Gly Gly
 65 70

```

<210> 118
<211> 22
<212> PRT
<213> Conus laterculatus

<220>
<221> PEPTIDE
<222> (1)..(22)
<223> Xaa at residue 6, 17 and 17 is Pro or Hyp

<400> 118
Arg Asp Cys Cys Thr Xaa Xaa Lys Lys Cys Arg Asp Arg Gln Cys Lys
1           5           10           15

Xaa Ala Arg Cys Cys Gly
20

<210> 119
<211> 314
<212> DNA
<213> Conus laterculatus

<400> 119
gggatcgata gcagttcatg atgtctaaac tgggagtctt gttgaccatc tgtctgcttc      60
ttttccct tactgctctt ccgatggatg gagatcaact tgcacgcca tctgcagagc      120
gtatgcagga caacatttca tctgagcagc atcacctctt tgaaaagaga cgaccaccat      180
gttgcaccta tgacggagt tgcctaaaag aatcatgcat gcgtaaagct tggcgat      240
gataacgtgt tcatgaccaa ctttgttatac acggctactc aagtgtctaa tgaataagta      300
aaatgattgc agta      314

<210> 120
<211> 74
<212> PRT
<213> Conus laterculatus

<400> 120
Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
1           5           10           15

Pro Leu Thr Ala Leu Pro Met Asp Gly Asp Gln Leu Ala Arg Arg Ser
20           25           30

Ala Glu Arg Met Gln Asp Asn Ile Ser Ser Glu Gln His His Leu Phe
35           40           45

Glu Lys Arg Arg Pro Pro Cys Cys Thr Tyr Asp Gly Ser Cys Leu Lys
50           55           60

Glu Ser Cys Met Arg Lys Ala Cys Cys Gly
65           70

<210> 121
<211> 22
<212> PRT
<213> Conus laterculatus

<220>
<221> PEPTIDE
<222> (1)..(22)
<223> Xaa at residue 14 is Glu or gamma-carboxy Glu; Xaa at residue 2 a

```

nd 3 is Pro or Hyp; Xaa at residue 7 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr

<400> 121
 Arg Xaa Xaa Cys Cys Thr Xaa Asp Gly Ser Cys Leu Lys Xaa Ser Cys
 1 5 10 15
 Met Arg Lys Ala Cys Cys
 20

<210> 122
<211> 314
<212> DNA
<213> Conus laterculatus

<400> 122
 gggatcgata gcagttcatg atgtctaaac tgggagtctt gttgaccacc tgtctgcttc 60
 tgtttccct tactgctctt ccgatggatg gagatcaact tgcacgcccga cctgcagagc 120
 gtatgcagga caacatttca tctgagcagc atcccttctt tgaaaggaga cgaccaccat 180
 gttgcaccta tgacggagt tgcctaaaag aatcatgcaa gcgtaaagct tgttgcggat 240
 aataacgtgt tgatgaccaa ctttgttatac acggctactc aagtgtctaa tgaataagta 300
 aaatgattgc agta 314

<210> 123
<211> 74
<212> PRT
<213> Conus laterculatus
<400> 123
 Met Met Ser Lys Leu Gly Val Leu Leu Thr Thr Cys Leu Leu Leu Phe
 1 5 10 15
 Pro Leu Thr Ala Leu Pro Met Asp Gly Asp Gln Leu Ala Arg Arg Pro
 20 25 30
 Ala Glu Arg Met Gln Asp Asn Ile Ser Ser Glu Gln His Pro Phe Phe
 35 40 45
 Glu Arg Arg Arg Pro Pro Cys Cys Thr Tyr Asp Gly Ser Cys Leu Lys
 50 55 60
 Glu Ser Cys Lys Arg Lys Ala Cys Cys Gly
 65 70

<210> 124
<211> 22
<212> PRT
<213> Conus laterculatus

<220>
<221> PEPTIDE
<222> (1)..(22)
<223> Xaa at residue 14 is Glu or gamma-carboxy Glu; Xaa at residue 2 and 3 is Pro or Hyp; Xaa at residue 7 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr

<400> 124
 Arg Xaa Xaa Cys Cys Thr Xaa Asp Gly Ser Cys Leu Lys Xaa Ser Cys
 1 5 10 15
 Lys Arg Lys Ala Cys Cys

20

<210> 125
 <211> 247
 <212> DNA
 <213> *Conus leopardus*

<400> 125
 ggatccatga tgtctaaact gggagtcttg ttgaccgtct gtctgcttct gtttcccctt 60
 actgctcttc ggctgggtgg agatcaacct gcagagcgac ctgcaaagcg tacgcaggac 120
 gacattccag atggacagca tccgttaaat gataggcaga taaactgttg cccgtggcca 180
 tgccctagta catgccgcca tcaatgctgc cattaatgtat aacgtgttga tgaccaactt 240
 tctcgag 247

<210> 126
 <211> 71
 <212> PRT
 <213> *Conus leopardus*

<400> 126
 Gly Ser Met Met Ser Lys Leu Gly Val Leu Leu Thr Val Cys Leu Leu
 1 5 10 15

Leu Phe Pro Leu Thr Ala Leu Arg Leu Val Gly Asp Gln Pro Ala Glu
 20 25 30

Arg Pro Ala Lys Arg Thr Gln Asp Asp Ile Pro Asp Gly Gln His Pro
 35 40 45

Leu Asn Asp Arg Gln Ile Asn Cys Cys Pro Trp Pro Cys Pro Ser Thr
 50 55 60

Cys Arg His Gln Cys Cys His
 65 70

<210> 127
 <211> 19
 <212> PRT
 <213> *Conus leopardus*

<220>
 <221> PEPTIDE
 <222> (1)..(19)
 <223> Xaa at residue 1 is Gln or pyro-Glu; Xaa at residue 6, 8 and 10 is Pro or Hyp; Xaa at residue 7 is Trp or bromo-Trp

<400> 127
 Xaa Ile Asn Cys Cys Xaa Xaa Xaa Cys Xaa Ser Thr Cys Arg His Gln
 1 5 10 15

Cys Cys His

<210> 128
 <211> 244
 <212> DNA
 <213> *Conus lividus*

<400> 128
 ggatccatga tgtctaaact gggagtcttg ttgaccgtct gtctgcttct gtttcccctt 60
 actgctcttc ggctgggttag agatcaacct gcagagcgac ctgcaaagcg tacgcaggac 120

gacattccaa atggacagga tccgttaatt gataggcaga taaattgttg cccttggcca 180
 tgccctgatt catgccacta tcaatgctgc cactgataac gtgttcatga ccaactttct 240
 cgag 244
 <210> 129
 <211> 71
 <212> PRT
 <213> Conus lividus

<400> 129
 Gly Ser Met Met Ser Lys Leu Gly Val Leu Leu Thr Val Cys Leu Leu
 1 5 10 15

Leu Phe Pro Leu Thr Ala Leu Arg Leu Val Arg Asp Gln Pro Ala Glu
 20 25 30

Arg Pro Ala Lys Arg Thr Gln Asp Asp Ile Pro Asn Gly Gln Asp Pro
 35 40 45

Leu Ile Asp Arg Gln Ile Asn Cys Cys Pro Trp Pro Cys Pro Asp Ser
 50 55 60

Cys His Tyr Gln Cys Cys His
 65 70

<210> 130
 <211> 19
 <212> PRT
 <213> Conus lividus

<220>
 <221> PEPTIDE
 <222> (1)..(19)
 <223> Xaa at residue 1 is Gln or pyro-Glu; Xaa at residue 6, 8 and 10 is Pro or Hyp; Xaa at residue 7 is Trp or bromo-Trp; Xaa at residue 15 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr

<400> 130
 Xaa Ile Asn Cys Cys Xaa Xaa Xaa Cys Xaa Asp Ser Cys His Xaa Gln
 1 5 10 15

Cys Cys His

<210> 131
 <211> 275
 <212> DNA
 <213> Conus lynceus

<400> 131
 aaggatcgat agcagttcat gatgtctaaa ctgggaggtct tgggttgcatt ctgtctgcctt 60
 ctgtttcccc ttactgctct tccgatggat ggagatcaat ctgcagacccg acttgcagag 120
 cgtatgcagg acaacatttc atctgagcag catcccttct ttgaaaagag aggacgagac 180
 tgggttgcacac ctccgaggaa atgcagagac cgagcctgca aacctcaacg ttgttgcgga 240
 ggataagctg ttgtatgacca actttgttat acggc 275

<210> 132
 <211> 75

<212> PRT

<213> Conus lynceus

<400> 132

Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
1 5 10 15Pro Leu Thr Ala Leu Pro Met Asp Gly Asp Gln Ser Ala Asp Arg Leu
20 25 30Ala Glu Arg Met Gln Asp Asn Ile Ser Ser Glu Gln His Pro Phe Phe
35 40 45Glu Lys Arg Gly Arg Asp Cys Cys Thr Pro Pro Arg Lys Cys Arg Asp
50 55 60Arg Ala Cys Lys Pro Gln Arg Cys Cys Gly Gly
65 70 75

<210> 133

<211> 23

<212> PRT

<213> Conus lynceus

<220>

<221> PEPTIDE

<222> (1)..(23)

<223> Xaa at residue 7, 8 and 18 is Pro or Hyp

<400> 133

Gly Arg Asp Cys Cys Thr Xaa Xaa Arg Lys Cys Arg Asp Arg Ala Cys
1 5 10 15Lys Xaa Gln Arg Cys Cys Gly
20

<210> 134

<211> 803

<212> DNA

<213> Conus magus

<400> 134

caagagggat cgatagcagt tcatgatgtc taaaactggga gtcttgtga ccatctgtct 60

gcttcgttt ccccttactg ctcttccgat ggtggagat gaacctgcaa accgacctgt 120

cgagcgtatg caggacaaca tttcatctga gcagtatccc ttgttgaga agagacgaga 180

ttgttgact ccgccgaaga aatgcaaaga ccgacaatgc aaaccccaga gatgttgcgc 240

tggacgataa cgtgttcatg accaacttta tcacggctac gtcaagtgtt tagtgaataa 300

gtaaaatgtat tgcagtcttg ctcagatttgc tttttgtgtt ttggctaaa gatcaatgac 360

caaaccgttg ttttgcgtcg gattgtcata tatttctcga ttccaatcca acactagatg 420

atttaatcac gatagattaa ttttctatca atgccttgat ttttcgtctg tcataatcgt 480

tttgcgtttata ttttgcgttc tacacaaacg catgcgtcga cgcgtgcacg 540

cacacacgca cgcacgcgtcg cacaaacatg cgcgcgcacg cacacacaca cacacacaca 600

caaacacaca cacgaagcaa tcacacaaatt agttgacatt atttatttat tcattgtatg 660

atttgcgtttata cgtttgcgttg ttttgcgtttata agttgacatttgcgtttgcgttg gatttatttg 720

aactgcttta ttgtatacga gtacttcgtg cggggaaaca ctgctaaaaa taaaacaaac	780
actgacgtag caaaaaaaaaaaa aaa	803
<210> 135	
<211> 75	
<212> PRT	
<213> Conus magus	
<400> 135	
Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe	
1	5
10	15
Pro Leu Thr Ala Leu Pro Met Asp Gly Asp Glu Pro Ala Asn Arg Pro	
20	25
30	
Val Glu Arg Met Gln Asp Asn Ile Ser Ser Glu Gln Tyr Pro Leu Phe	
35	40
45	
Glu Lys Arg Arg Asp Cys Cys Thr Pro Pro Lys Lys Cys Lys Asp Arg	
50	55
60	
Gln Cys Lys Pro Gln Arg Cys Cys Ala Gly Arg	
65	70
75	
<210> 136	
<211> 22	
<212> PRT	
<213> Conus magus	
<220>	
<221> PEPTIDE	
<222> (1)..(22)	
<223> Xaa at residue 6 and 7 is Pro or Hyp	
<400> 136	
Arg Asp Cys Cys Thr Xaa Xaa Lys Lys Cys Lys Asp Arg Gln Cys Lys	
1	5
10	15
Xaa Gln Arg Cys Cys Ala	
20	
<210> 137	
<211> 656	
<212> DNA	
<213> Conus magus	
<400> 137	
caagagggat cgatacgagt tcatgatgtc taaactggga gtcttggta ccatctgtct	60
gcttcgttt ccccttactg ctcttccaat ggatggagat caacctgcag accaacctgc	120
agatcgtatg caggacgaca tttcatctga gcagtatccc ttgtttgata tgagaaaaag	180
gtgttgcggc cccggcgggtt catgccccgt atatttcaga gacaattta ttgtgggtt	240
ttgttaaatg acaacgtgtc gatgaccaac ttcattatca cgactacgcc aagtgtctaa	300
tgaataaata aaatgattgc agtctcgctc agatggctt ttgtatggt gtctaaagat	360
caatgaccaa accgttggtt tggtgtggat tttcatatat ttctcgagtc ctatccaaca	420
ctagatgatt taatcacgat agatctgatt ttttatcaa aggcttgggtt ttctcgctgt	480

cacatcagtt ttgtttatat ttaatttttc gtcactgatt acacacacgc atgaacgcac 540
 agagtactaa cacatacaca cacacacaca cacacacaca cacacacaca cacacacaca 600
 cacacacaca cacgcgcgcg cgccgcgcac tcttagtagcg ccgcgacgc acacac 656

<210> 138
 <211> 74
 <212> PRT
 <213> Conus magus

<400> 138
 Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
 1 5 10 15
 Pro Leu Thr Ala Leu Pro Met Asp Gly Asp Gln Pro Ala Asp Gln Pro
 20 25 30
 Ala Asp Arg Met Gln Asp Asp Ile Ser Ser Glu Gln Tyr Pro Leu Phe
 35 40 45
 Asp Met Arg Lys Arg Cys Cys Gly Pro Gly Gly Ser Cys Pro Val Tyr
 50 55 60
 Phe Arg Asp Asn Phe Ile Cys Gly Cys Cys
 65 70

<210> 139
 <211> 21
 <212> PRT
 <213> Conus magus

<220>
 <221> PEPTIDE
 <222> (1)..(21)
 <223> Xaa at residue 4 and 9 is Pro or Hyp; Xaa at residue is 11 Tyr, 1
 25I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Ty
 r

<400> 139
 Cys Cys Gly Xaa Gly Gly Ser Cys Xaa Val Xaa Phe Arg Asp Asn Phe
 1 5 10 15
 Ile Cys Gly Cys Cys
 20

<210> 140
 <211> 594
 <212> DNA
 <213> Conus magus

<400> 140
 caagagggat cgatagcagt tcatgatgtc taaactggga gtcttggta ccatctgttt 60
 gcttctgttt ccccttactg ctcttccgag ggatggagat caatctgttag accgacacctgc 120
 agagcgtatg caggacgaca tttcatctga gctgcattccc ttgtcaatca gaaaaagaat 180
 gtgttgcggc gagagtgcgc catgccccag ctatccaga aacagtcaga tttgtcattg 240
 ttgttaaatg acaacgtgtc gatgaccacc ttcgttatca cgactaatga taagtaaat 300
 gattgcagtc tcgctcagat ttgctttgt atttggctaa aagatcaat gaccaaaaccg 360
 ttgtttgtat gtggattttc atatatttct cgagtcctat ccaacactag atgatttaat 420

cacgatagat ctgattttt tatcaaagcc ttggttttc gtctgtcaca tcagtttgt 480
 ttatatttaa ttttcgtca ctgattacac acacgcata acgcacagac gtactaacac 540
 atacacacac acacacacac acacacacac acacacacac acacacacac acac 594

 <210> 141
 <211> 74
 <212> PRT
 <213> Conus magus

 <400> 141
 Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
 1 5 10 15
 Pro Leu Thr Ala Leu Pro Arg Asp Gly Asp Gln Ser Val Asp Arg Pro
 20 25 30
 Ala Glu Arg Met Gln Asp Asp Ile Ser Ser Glu Leu His Pro Leu Ser
 35 40 45
 Ile Arg Lys Arg Met Cys Cys Gly Glu Ser Ala Pro Cys Pro Ser Tyr
 50 55 60
 Phe Arg Asn Ser Gln Ile Cys His Cys Cys
 65 70

 <210> 142
 <211> 22
 <212> PRT
 <213> Conus magus

 <220>
 <221> PEPTIDE
 <222> (1)..(22)
 <223> Xaa at residue 5 is Glu or gamma-carboxy Glu; Xaa at residue 8 and 10 is Pro or Hyp; Xaa at residue 12 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr

 <400> 142
 Met Cys Cys Gly Xaa Ser Ala Xaa Cys Xaa Ser Xaa Phe Arg Asn Ser
 1 5 10 15
 Gln Ile Cys His Cys Cys
 20

 <210> 143
 <211> 501
 <212> DNA
 <213> Conus magus

 <400> 143
 caagagggat cgatagcagt tcatgatgtc taaactggga gtcttggta ccatctgtct 60
 gcttctgttt ccccttactg ctcttccaaat ggatggagat caacctgcag accaacctgc 120
 agatcgtatg caggacgaca tttcatctga gcagtatccc ttgtttgata agagacaaa 180
 gtgttgcggc cccggcgggtt catgccccgt atatttcaca gacaattta ttgttggttg 240
 ttgttaaatg acaacgtgtc gatgaccaac ttcatatca cgactacgcc aagtgtctaa 300
 tgaataaataa aaatgattgc agtctcgctc agatggctt ttgttattgg tctaaagatc 360

aatgaccaaa ccgttgtttt ggtgctggat tttcatatat ttctcgattc ctatccaaca 420
ctagatgatt taatcacgat agatctgatt ttttatcaa tgccttaatt tttgctctg 480
tcatatcagt tttgttata t 501

<210> 144
<211> 74
<212> PRT
<213> Conus magus

<400> 144
Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
1 5 10 15

Pro Leu Thr Ala Leu Pro Met Asp Gly Asp Gln Pro Ala Asp Gln Pro
20 25 30

Ala Asp Arg Met Gln Asp Asp Ile Ser Ser Glu Gln Tyr Pro Leu Phe
35 40 45

Asp Lys Arg Gln Lys Cys Cys Gly Pro Gly Gly Ser Cys Pro Val Tyr
50 55 60

Phe Thr Asp Asn Phe Ile Cys Gly Cys Cys
65 70

<210> 145
<211> 23
<212> PRT
<213> Conus magus

<220>
<221> PEPTIDE
<222> (1)..(23)
<223> Xaa at residue 1 is Gln or pyro-Glu; Xaa at residue 6 and 11 is P
ro or Hyp; Xaa at residue 13 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-
iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr

<400> 145
Xaa Lys Cys Cys Gly Xaa Gly Gly Ser Cys Xaa Val Xaa Phe Thr Asp
1 5 10 15

Asn Phe Ile Cys Gly Cys Cys
20

<210> 146
<211> 454
<212> DNA
<213> Conus magus

<400> 146
caagagggat cgatagcagt tcatgatgtc taaactggga gtcttggat ccatctgtct 60
gtttctgttt ccccttactg ctcttccaaat ggatggagat caacctgcag accaacctgc 120
agatcgatcg caggacgaca tttcatctga gcagtatccc ttgtttgata agagacaaaa 180
gtgttgcggc cccggcgggtt catgccccgt atatccaga gacaattta ttgtgggttg 240
ttgttaaatg acaacgtgtc gatgaccatc ttcattatca cgactacgcc aagtgtctaa 300
tgaataaataa aaatgattgc agtctcgctc agatttgctt ttgttatttg gtctaaagat 360
caatgaccaaa accgttgttt tgggtggat tttcatatat ttctcgattc ctatccaaca 420

ctagatgatt taatcacgat agatctgatt tttt 454

<210> 147
 <211> 74
 <212> PRT
 <213> Conus magus

<400> 147
 Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
 1 5 10 15

Pro Leu Thr Ala Leu Pro Met Asp Gly Asp Gln Pro Ala Asp Gln Pro
 20 25 30

Ala Asp Arg Met Gln Asp Asp Ile Ser Ser Glu Gln Tyr Pro Leu Phe
 35 40 45

Asp Lys Arg Gln Lys Cys Cys Gly Pro Gly Gly Ser Cys Pro Val Tyr
 50 55 60

Phe Arg Asp Asn Phe Ile Cys Gly Cys Cys
 65 70

<210> 148
 <211> 23
 <212> PRT
 <213> Conus magus

<220>
 <221> PEPTIDE
 <222> (1)..(23)
 <223> Xaa at residue 1 is Gln or pyro-Glu; Xaa at residue 6 and 11 is P
 ro or Hyp; Xaa at residue 13 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-
 iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr

<400> 148
 Xaa Lys Cys Cys Gly Xaa Gly Gly Ser Cys Xaa Val Xaa Phe Arg Asp
 1 5 10 15

Asn Phe Ile Cys Gly Cys Cys
 20

<210> 149
 <211> 22
 <212> PRT
 <213> Conus magus

<220>
 <221> PEPTIDE
 <222> (1)..(22)
 <223> Xaa at residue 1 is Gln or pyro-Glu; Xaa at residue 10 and 20 is
 Pro or Hyp; Xaa at residue 12 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-
 iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr

<400> 149
 Xaa Lys Cys Cys Ser Gly Gly Ser Cys Xaa Leu Xaa Phe Arg Asp Arg
 1 5 10 15

Leu Ile Cys Xaa Cys Cys
 20

<210> 150
 <211> 19
 <212> PRT

<213> Conus marmoreus

<220>

<221> PEPTIDE

<222> (1)..(19)

<223> Xaa at residue 16 is Pro or Hyp

<400> 150

Ser	Lys	Gln	Cys	Cys	His	Leu	Ala	Ala	Cys	Arg	Phe	Gly	Cys	Thr	Xaa
1				5				10						15	

Cys Cys Asn

<210> 151

<211> 321

<212> DNA

<213> Conus marmoreus

<400> 151

caagaaggat	cgatacgagt	tcatgatgtc	taaactggga	gtcttggta	ccatctgtct	60
------------	------------	------------	------------	-----------	------------	----

gcttctgttt	cccggttactg	ctcttccgat	ggatgggtat	caacctgcag	accgacttgt	120
agagcgtatg	caggacaaca	tttcatctga	gcagcatccc	ttctttgaaa	agagaagagg	180

aggctgttgc	acacctccga	ggaaatgcaa	agaccgagcc	tgcaaaccctg	cacgttgctg	240
------------	------------	------------	------------	-------------	------------	-----

cggcccagga	taacgtgttg	atgaccaact	ttgttatcac	ggctacgtca	agtgtctagt	300
------------	------------	------------	------------	------------	------------	-----

gaataagtaa	aacgattgca	g				321
------------	------------	---	--	--	--	-----

<210> 152

<211> 76

<212> PRT

<213> Conus marmoreus

<400> 152

Met	Met	Ser	Lys	Leu	Gly	Val	Leu	Leu	Thr	Ile	Cys	Leu	Leu	Leu	Phe
1				5				10						15	

Pro	Val	Thr	Ala	Leu	Pro	Met	Asp	Gly	Asp	Gln	Pro	Ala	Asp	Arg	Leu
				20				25					30		

Val	Glu	Arg	Met	Gln	Asp	Asn	Ile	Ser	Ser	Glu	Gln	His	Pro	Phe	Phe
			35			40				45					

Glu	Lys	Arg	Arg	Gly	Gly	Cys	Cys	Thr	Pro	Pro	Arg	Lys	Cys	Lys	Asp
	50					55			60						

Arg	Ala	Cys	Lys	Pro	Ala	Arg	Cys	Cys	Gly	Pro	Gly
65				70				75			

<210> 153

<211> 24

<212> PRT

<213> Conus marmoreus

<220>

<221> PEPTIDE

<222> (1)..(24)

<223> Xaa at residue 3, 8, 18 and 24 is Pro or Hyp

<400> 153

Arg	Gly	Gly	Cys	Cys	Thr	Xaa	Xaa	Arg	Lys	Cys	Lys	Asp	Arg	Ala	Cys
1				5				10					15		

Lys Xaa Ala Arg Cys Cys Gly Xaa
20

<210> 154
<211> 296
<212> DNA
<213> Conus marmoreus

<400> 154
gagctcggt a cccgaccc aagaggatc gatagcagtt catgatgtct aaactggaa 60
tcttggacatctgtcta cttctatttc cccttactgc tggccgctg gatggagatc 120
aacctgcaga ccgacctgca gagcgtatgc aggacgacat ttcatctgaa catcatccct 180
tttttgcatcc cgtcaaacgg tggcaggt tatcatgcgg cctggatgc cacccttgg 240
gtggatgacc agctttgtta tcgcggcctc atcaagtgtc taatgaataa gtaaaa 296

<210> 155
<211> 68
<212> PRT
<213> Conus marmoreus

<400> 155
Met Met Ser Lys Leu Gly Ile Leu Leu Thr Ile Cys Leu Leu Leu Phe
1 5 10 15

Pro Leu Thr Ala Val Pro Leu Asp Gly Asp Gln Pro Ala Asp Arg Pro
20 25 30

Ala Glu Arg Met Gln Asp Asp Ile Ser Ser Glu His His Pro Phe Phe
35 40 45

Asp Pro Val Lys Arg Cys Cys Arg Leu Ser Cys Gly Leu Gly Cys His
50 55 60

Pro Cys Cys Gly
65

<210> 156
<211> 14
<212> PRT
<213> Conus marmoreus

<220>
<221> PEPTIDE
<222> (1)..(14)
<223> Xaa at residue 12 is Pro or Hyp

<400> 156
Cys Cys Arg Leu Ser Cys Gly Leu Gly Cys His Xaa Cys Cys
1 5 10

<210> 157
<211> 355
<212> DNA
<213> Conus marmoreus

<400> 157
ggcctacacc aagcttgc a ggccttgc a gactctaga gatccccga tcgatagcag 60
ttcatgtatgt ctagactggg agtcttgg accatctgtc tacttctgtt tcccccttact 120

gctgttccgc tggatggaga tcaacctgcg gaccgacctg cagagcgcct gcaggacgac 180
 atttcatctg aacatcatcc ccattttgat tccggcagag agtgtgcgg ttcgttcgca 240
 tgccgcttg gatgcgtgcc ttgttgtta tgaccagctt tgttatcacg gcctcatcga 300
 gtgtctaattt aataagtaaa acgattgcag taggcgggta ccgagtcga attcc 355

 <210> 158
 <211> 69
 <212> PRT
 <213> Conus marmoreus

 <400> 158
 Met Met Ser Arg Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
 1 5 10 15

 Pro Leu Thr Ala Val Pro Leu Asp Gly Asp Gln Pro Ala Asp Arg Pro
 20 25 30

 Ala Glu Arg Leu Gln Asp Asp Ile Ser Ser Glu His His Pro His Phe
 35 40 45

 Asp Ser Gly Arg Glu Cys Cys Gly Ser Phe Ala Cys Arg Phe Gly Cys
 50 55 60

 Val Pro Cys Cys Val
 65

 <210> 159
 <211> 17
 <212> PRT
 <213> Conus marmoreus

 <220>
 <221> PEPTIDE
 <222> (1)..(17)
 <223> Xaa at residue 1 is Glu or gamma-carboxy Glu; Xaa at residue 14 is Pro or Hyp

 <400> 159
 Xaa Cys Cys Gly Ser Phe Ala Cys Arg Phe Gly Cys Val Xaa Cys Cys
 1 5 10 15

 Val

 <210> 160
 <211> 295
 <212> DNA
 <213> Conus marmoreus

 <400> 160
 cgacctaag agggatcgat agcagttcat gatgtctaaa ctgggagtct tgttgaccat 60
 ctgtctactt ctatccccc ttactgctgt tccgctggat ggagaccaac ctgcagaccc 120
 acctgcagag cgtatgcagg acgacatttc atctgaacgt catcctttt ttgatcgca 180
 caaacagtgt tgccatctgc cggcatgccg ctccggatgt acgccttgtt gttgggtatc 240
 agctttgtta tcgcgtcctc atcaagtgtc taatgaataa gtaaaatgtat tgcag 295

 <210> 161
 <211> 67
 <212> PRT

<213> Conus marmoreus

<400> 161

Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
1 5 10 15

Pro Leu Thr Ala Val Pro Leu Asp Gly Asp Gln Pro Ala Asp Arg Pro
20 25 30

Ala Glu Arg Met Gln Asp Asp Ile Ser Ser His Pro Phe Phe Asp Arg
35 40 45

Ser Lys Gln Cys Cys His Leu Pro Ala Cys Arg Phe Gly Cys Thr Pro
50 55 60

Cys Cys Trp

65

<210> 162

<211> 19

<212> PRT

<213> Conus marmoreus

<220>

<221> PEPTIDE

<222> (1)..(19)

<223> Xaa at residue 8 and 16 is Pro or Hyp; Xaa at residue 19 is Trp o
r bromo-Trp

<400> 162

Ser Lys Gln Cys Cys His Leu Xaa Ala Cys Arg Phe Gly Cys Thr Xaa
1 5 10 15

Cys Cys Xaa

<210> 163

<211> 235

<212> DNA

<213> Conus marmoreus

<400> 163

ggatccatga tgtctaaact gggagtcttg ttgaccatct gtctgcttct gtttcccctt 60

actgctcttc cgctggatgg agatcaacct gcagaccaac gtgcagagcg tacgcaggcc 120

gagaagcatt cttgcctga tccgagaatg ggctgttgcc cgttccatg caaaaccagt 180

tgcactactt tgtgttgcgg gtgatgataa cgtgttgatg accaactttc tcgag 235

<210> 164

<211> 67

<212> PRT

<213> Conus marmoreus

<400> 164

Gly Ser Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu
1 5 10 15

Leu Phe Pro Leu Thr Ala Leu Pro Leu Asp Gly Asp Gln Pro Ala Asp
20 25 30

Gln Arg Ala Glu Arg Thr Gln Ala Glu Lys His Ser Leu Pro Asp Pro
35 40 45

Arg Met Gly Cys Cys Pro Phe Pro Cys Lys Thr Ser Cys Thr Thr Leu

50

55

60

Cys Cys Gly
65

<210> 165
<211> 17
<212> PRT
<213> Conus marmoreus

<220>
<221> PEPTIDE
<222> (1)..(17)
<223> Xaa at residue 5 and 7 is Pro or Hyp

<400> 165
Met Gly Cys Cys Xaa Phe Xaa Cys Lys Thr Ser Cys Thr Thr Leu Cys
1 5 10 15

Cys

<210> 166
<211> 16
<212> PRT
<213> Conus marmoreus

<220>
<221> PEPTIDE
<222> (1)..(16)
<223> Xaa at residue 4 and 6 is Trp or bromo-Trp

<400> 166
Cys Cys His Xaa Asn Xaa Cys Asp His Leu Cys Ser Cys Cys Gly Ser
1 5 10 15

<210> 167
<211> 357
<212> DNA
<213> Conus marmoreus

<400> 167
gccaagcttg catgcctgca ggatgactct agaggatccc cacctaaga gggatcgata 60
gcagttcatg atgtctaaac tgggagtc ttgtgaccatc tgtctacttc tgtttgcct 120
tactgctgtt ccgcgtggatg gagatcaacc tgcagaccga cctgcagaac gtatgcagga 180
cgacatttca tctgaacgtc atcccatgtt tcatgccgtc agagattgtt gcccgttgcc 240
ggcatgcccc tttggatgca acccttgttt tgatgacca gctttgttat cgggacctca 300
tcaagtgtct aatgaataag taaaaaacga ttcgagtggg taccgagctc gaattcc 357

<210> 168
<211> 67
<212> PRT
<213> Conus marmoreus

<400> 168
Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
1 5 10 15

Ala Leu Thr Ala Val Pro Leu Asp Gly Asp Gln Pro Ala Asp Arg Pro
20 25 30

Ala Glu Arg Met Gln Asp Asp Ile Ser Ser His Pro Met Phe Asp Ala
 35 40 45

Val Arg Asp Cys Cys Pro Leu Pro Ala Cys Pro Phe Gly Cys Asn Pro
 50 55 60

Cys Cys Gly
 65

<210> 169
 <211> 16
 <212> PRT
 <213> Conus marmoreus

<220>
 <221> PEPTIDE
 <222> (1)..(16)
 <223> Xaa at residue 4, 6, 9 and 14 is Pro or Hyp
 <400> 169

Asp Cys Cys Xaa Leu Xaa Ala Cys Xaa Phe Gly Cys Asn Xaa Cys Cys
 1 5 10 15

<210> 170
 <211> 16
 <212> PRT
 <213> Conus marmoreus

<220>
 <221> PEPTIDE
 <222> (1)..(16)
 <223> Xaa at residue 4 and 13 is Pro or Hyp

<400> 170
 Cys Cys Ala Xaa Ser Ala Cys Arg Leu Gly Cys Arg Xaa Cys Cys Arg
 1 5 10 15

<210> 171
 <211> 16
 <212> PRT
 <213> Conus marmoreus

<220>
 <221> PEPTIDE
 <222> (1)..(16)
 <223> Xaa at residue 4 and 13 is Pro or Hyp

<400> 171

Cys Cys Ala Xaa Ser Ala Cys Arg Leu Gly Cys Arg Xaa Cys Cys Arg
 1 5 10 15

<210> 172
 <211> 16
 <212> PRT
 <213> Conus marmoreus

<220>
 <221> PEPTIDE
 <222> (1)..(16)
 <223> Xaa at residue 4 and 13 is Pro or Hyp

<400> 172
 Cys Cys Ala Xaa Ser Ala Cys Arg Leu Gly Cys Arg Xaa Cys Cys Arg
 1 5 10 15

<210> 173
 <211> 17
 <212> PRT
 <213> Conus marmoreus

<220>
 <221> PEPTIDE
 <222> (1)..(17)
 <223> Xaa at residue 14 is Pro or Hyp

<400> 173
 Gly Cys Cys Gly Ser Phe Ala Cys Arg Phe Gly Cys Val Xaa Cys Cys
 1 5 10 15

Val

<210> 174
 <211> 244
 <212> DNA
 <213> Conus nobilis

<400> 174
 ggatccatga tgtctaaact gggagtcttg ttgaccatct gtctacttct gttcccccctt 60
 actgctcttc cgctggatga agatcaacccg gtacaccgac ctgcagagcg tatgcaggac 120
 atttcatctg atcaacatct cttctttgat ctcataaac ggtgctgcga gttgccatgc 180
 gggccaggct tttgcgtccc ttgttgctga catcaataac gtgttgatga ccaactttct 240
 cgag 244

<210> 175
 <211> 69
 <212> PRT
 <213> Conus nobilis

<400> 175
 Gly Ser Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu
 1 5 10 15

Leu Phe Pro Leu Thr Ala Leu Pro Leu Asp Glu Asp Gln Pro Val His
 20 25 30

Arg Pro Ala Glu Arg Met Gln Asp Ile Ser Ser Asp Gln His Leu Phe
 35 40 45

Phe Asp Leu Ile Lys Arg Cys Cys Glu Leu Pro Cys Gly Pro Gly Phe
 50 55 60

Cys Val Pro Cys Cys
 65

<210> 176
 <211> 15
 <212> PRT
 <213> Conus nobilis

<220>
 <221> PEPTIDE
 <222> (1)..(15)
 <223> Xaa at residue 3 is Glu or gamma-carboxy Glu; Xaa at residue 5, 8
 adn 13 is Pro or Hyp

<400> 176

Cys Cys Xaa Leu Xaa Cys Gly Xaa Gly Phe Cys Val Xaa Cys Cys
 1 5 10 15

<210> 177

<211> 262

<212> DNA

<213> Conus nobilis

<400> 177

ggatccatga tgtctaaact gggagtcgg ttgaccatct gtctacttct gttccccc 60

actgcttttc cgatggatgg agatcaaccc gcagaccaac ctgcagatcg tatgcaggac 120

gacatttcat ctgagcagta tcccttggtt gataagagac aaaagtgtt cactggaaag 180

aagggggtcat gctccggcaa agcatgcaaa aatctcaaat gttgctctgg acgataacgt 240
 gttgatgacc aactttctcg ag 262

<210> 178

<211> 78

<212> PRT

<213> Conus nobilis

<400> 178

Gly Ser Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu
 1 5 10 15

Leu Phe Pro Leu Thr Ala Phe Pro Met Asp Gly Asp Gln Pro Ala Asp
 20 25 30

Gln Pro Ala Asp Arg Met Gln Asp Asp Ile Ser Ser Glu Gln Tyr Pro
 35 40 45

Leu Phe Asp Lys Arg Gln Lys Cys Cys Thr Gly Lys Lys Gly Ser Cys
 50 55 60

Ser Gly Lys Ala Cys Lys Asn Leu Lys Cys Cys Ser Gly Arg
 65 70 75

<210> 179

<211> 23

<212> PRT

<213> Conus nobilis

<220>

<221> PEPTIDE

<222> (1)..(23)

<223> Xaa at residue 1 is Gln or pyro-Glu

<400> 179

Xaa Lys Cys Cys Thr Gly Lys Gly Ser Cys Ser Gly Lys Ala Cys
 1 5 10 15

Lys Asn Leu Lys Cys Cys Ser
 20

<210> 180

<211> 238

<212> DNA

<213> Conus pulicarius

<400> 180

ggatccatga tgtctaaact gggagtttg ttgaccatct gtctgcttct gttccccc 60

actgctgttc cgctggatgg agatcaaccc gcagacccgac ctgcagagcg tatgcaggac 120

attgcaactg aacagcatcc cttctttgat cccgtcaaac ggtgttgcaa cagctgttac 180
 atgggatgca tcccttggtg cttctagtaa taacgtgtt atgaccaact ttctcgag 238
 <210> 181
 <211> 68
 <212> PRT
 <213> Conus pulicarius

<400> 181
 Gly Ser Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu
 1 5 10 15

Leu Phe Pro Leu Thr Ala Val Pro Leu Asp Gly Asp Gln Pro Ala Asp
 20 25 30

Arg Pro Ala Glu Arg Met Gln Asp Ile Ala Thr Glu Gln His Pro Phe
 35 40 45

Phe Asp Pro Val Lys Arg Cys Cys Asn Ser Cys Tyr Met Gly Cys Ile
 50 55 60

Pro Cys Cys Phe
 65

<210> 182
 <211> 14
 <212> PRT
 <213> Conus pulicarius

<220>
 <221> PEPTIDE
 <222> (1)..(14)
 <223> Xaa at residue 11 is Pro or Hyp; Xaa at residue 5 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr

<400> 182
 Cys Cys Asn Ser Cys Xaa Met Gly Cys Ile Xaa Cys Cys Phe
 1 5 10

<210> 183
 <211> 238
 <212> DNA
 <213> Conus quercinus

<400> 183
 ggatccatga tgtctaaact gggagtcttg ttgaccatct gtctgcttct gttccccc 60
 acagctcttc agctggatgg agatcaacct gcagaccgac ctgcagagcg tacgcaggac 120
 attgcatctg aacagtatcg aaagtttgat cagagacaga ggtgttgcca gtggccatgc 180
 cccggtagtt gcagatgctg ccgtactggtaacgtgtt atgaccaact ttctcgag 238

<210> 184
 <211> 70
 <212> PRT
 <213> Conus quercinus

<400> 184
 Gly Ser Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu
 1 5 10 15

Leu Phe Pro Leu Thr Ala Leu Gln Leu Asp Gly Asp Gln Pro Ala Asp

20

25

30

Arg Pro Ala Glu Arg Thr Gln Asp Ile Ala Ser Glu Gln Tyr Arg Lys
 35 40 45

Phe Asp Gln Arg Gln Arg Cys Cys Gln Trp Pro Cys Pro Gly Ser Cys
 50 55 60

Arg Cys Cys Arg Thr Gly
 65 70

<210> 185

<211> 17

<212> PRT

<213> Conus quercinus

<220>

<221> PEPTIDE

<222> (1)..(17)

<223> Xaa at residue 1 is Gln or pyro-Glu; Xaa at residue 7 and 9 is Pr
 o or Hyp; Xaa at residue 6 is Trp or bromo-Trp

<400> 185

Xaa Arg Cys Cys Gln Xaa Xaa Cys Xaa Gly Ser Cys Arg Cys Cys Arg
 1 5 10 15

Thr

<210> 186

<211> 15

<212> PRT

<213> Conus quercinus

<220>

<221> PEPTIDE

<222> (1)..(15)

<223> Xaa at residue 11 and 14 is Pro or Hyp

<400> 186

Cys Cys Ser Gln Asp Cys Leu Val Cys Ile Xaa Cys Cys Xaa Asn
 1 5 10 15

<210> 187

<211> 15

<212> PRT

<213> Conus quercinus

<220>

<221> PEPTIDE

<222> (1)..(15)

<223> Xaa at residue 11 14 is Pro or Hyp; Xaa at residue 7 is Trp or br
 omo-Trp

<400> 187

Cys Cys Ser Arg His Cys Xaa Val Cys Ile Xaa Cys Cys Xaa Asn
 1 5 10 15

<210> 188

<211> 323

<212> DNA

<213> Conus radiatus

<400> 188

tcaagaagga tcgatagcag ttcatgatgt ctaaactggg agtcttgttg accatctg 60

tgcttctgtt tccccttact gctcttccga tggatggaga tcaacctgta gaccgacttg 120
 cagagcgtat gcaggacaac atttcatctg agcagcatac cttcttgaa aagagactac 180
 catcgtgttg ctcccctaac ttgcggcttt gcccagttacc agcatgaaa cgtaaccctt 240
 gttgcacagg ataacgtgtt gatgaccaac tttgttatca cggtacgtc aagtgtctag 300
 tgaataagta aaacgattgc agt 323

<210> 189
 <211> 76
 <212> PRT
 <213> Conus radiatus

<400> 189
 Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
 1 5 10 15
 Pro Leu Thr Ala Leu Pro Met Asp Gly Asp Gln Pro Val Asp Arg Leu
 20 25 30
 Ala Glu Arg Met Gln Asp Asn Ile Ser Ser Glu Gln His Thr Phe Phe
 35 40 45
 Glu Lys Arg Leu Pro Ser Cys Cys Ser Leu Asn Leu Arg Leu Cys Pro
 50 55 60
 Val Pro Ala Cys Lys Arg Asn Pro Cys Cys Thr Gly
 65 70 75

<210> 190
 <211> 24
 <212> PRT
 <213> Conus radiatus

<220>
 <221> PEPTIDE
 <222> (1)..(24)
 <223> Xaa at residue 2, 13, 15 and 21 is Pro or Hyp

<400> 190
 Leu Xaa Ser Cys Cys Ser Leu Asn Leu Arg Leu Cys Xaa Val Xaa Ala
 1 5 10 15
 Cys Lys Arg Asn Xaa Cys Cys Thr
 20

<210> 191
 <211> 336
 <212> DNA
 <213> Conus radiatus

<400> 191
 aggtcgactc tagaggatcc ccaaggatcg atagcagttc atgatgtcta aactgggagt 60
 cttgttgacc atctgtctgc ttctgtttcc ctttactgct cttccgatgg atggagatca 120
 acctgcagac cgacttgcag agcgtatgca ggacgacatt tcatctgagc agcatccctt 180
 cttaaaaaag agacaacaaa gatgttgac cgttaagagg atttgcac taccagcatg 240
 cagaagtaaa ctttgcac aatcataacg tattgtgac caactttgtt atcacggcta 300
 cgtcaagtgt ctagtgaata agtaaaatga ttgcag 336

<210> 192

<211> 75

<212> PRT

<213> Conus radiatus

<400> 192

Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
1 5 10 15Pro Leu Thr Ala Leu Pro Met Asp Gly Asp Gln Pro Ala Asp Arg Leu
20 25 30
Ala Glu Arg Met Gln Asp Asp Ile Ser Ser Glu Gln His Pro Phe Phe
35 40 45Lys Lys Arg Gln Gln Arg Cys Cys Thr Val Lys Arg Ile Cys Pro Val
50 55 60Pro Ala Cys Arg Ser Lys Pro Cys Cys Lys Ser
65 70 75

<210> 193

<211> 24

<212> PRT

<213> Conus radiatus

<220>

<221> PEPTIDE

<222> (1)..(24)

<223> Xaa at residue 1 is Gln or pyro-Glu; Xaa at residue 12, 14 and 20
is Pro or Hyp

<400> 193

Xaa Gln Arg Cys Cys Thr Val Lys Arg Ile Cys Xaa Val Xaa Ala Cys
1 5 10 15Arg Ser Lys Xaa Cys Cys Lys Ser
20

<210> 194

<211> 326

<212> DNA

<213> Conus radiatus

<400> 194

acctcaagaa ggatcgatag cagttcatga tgtctaaact gggagtcttg ttgaccatct 60

gtctgcttct gtttcccggtt actgctcttc cgatggatgg tcatcaacct gcagaccgac 120

ttgttagagcg tatgcaggac aacatttcat ctgagcagca tcccttcttt gaaaagagaa 180

gaggaggctg ttgcacacct ccgagggaaat gcaaagaccg agcctgcaaa cctgcacgtt 240

gctgcggccc aggataacgt gttgatgacc aactttgtta tcacggctac gtcaagtgtc 300

tagtgaataa gtaaaacgt tgcagt 326

<210> 195

<211> 76

<212> PRT

<213> Conus radiatus

<400> 195

Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
1 5 10 15

Pro Val Thr Ala Leu Pro Met Asp Gly Asp Gln Pro Ala Asp Arg Leu
 20 25 30

Val Glu Arg Met Gln Asp Asn Ile Ser Ser Glu Gln His Pro Phe Phe
 35 40 45

Glu Lys Arg Arg Gly Gly Cys Cys Thr Pro Pro Arg Lys Cys Lys Asp
 50 55 60

Arg Ala Cys Lys Pro Ala Arg Cys Cys Gly Pro Gly
 65 70 75

<210> 196

<211> 24

<212> PRT

<213> Conus radiatus

<220>

<221> PEPTIDE

<222> (1)..(24)

<223> Xaa at residue 7, 8, 18 and 24 is Pro or Hyp

<400> 196

Arg Gly Gly Cys Cys Thr Xaa Xaa Arg Lys Cys Lys Asp Arg Ala Cys
 1 5 10 15

Lys Xaa Ala Arg Cys Cys Gly Xaa
 20

<210> 197

<211> 238

<212> DNA

<213> Conus rattus

<400> 197

ggatccatga tgtctaaact gggagtcttg gtgaccatct gcctgcttct gttcccttct 60

gctgcttttc cactggatgg agatcaacct gcagaccacc ctgcaaagcg tacgcaagat 120

gacagttcag ctgcccgtat caatgcctgg cttgatgaat cccagacttg ctgcagtaac 180

tgcggtaag attgtgatgg ttgttgccag taacgtgttg atgaccaact ttctcgag 238

<210> 198

<211> 70

<212> PRT

<213> Conus rattus

<400> 198

Gly Ser Met Met Ser Lys Leu Gly Val Leu Val Thr Ile Cys Leu Leu
 1 5 10 15

Leu Phe Pro Leu Ala Ala Phe Pro Leu Asp Gly Asp Gln Pro Ala Asp
 20 25 30

His Pro Ala Lys Arg Thr Gln Asp Asp Ser Ser Ala Ala Leu Ile Asn
 35 40 45

Ala Trp Leu Asp Glu Ser Gln Thr Cys Cys Ser Asn Cys Gly Glu Asp
 50 55 60

Cys Asp Gly Cys Cys Gln
 65 70

<210> 199
 <211> 16
 <212> PRT
 <213> Conus rattus

<220>
 <221> PEPTIDE
 <222> (1)..(16)
 <223> Xaa at residue 1 is Gln or pyro-Glu; Xaa at residue 9 is Glu or gamma-carboxy Glu
 <400> 199
 Xaa Thr Cys Cys Ser Asn Cys Gly Xaa Asp Cys Asp Gly Cys Cys Gln
 1 5 10 15

<210> 200
 <211> 327
 <212> DNA
 <213> Conus stercusmuscarum

<400> 200
 gacctcaaga gggatcgata gcagttcgtg atgtctaaac tgggagtc ttgtgaccatc 60
 tgtctgcttc tgtttcctct tactgctctt ccgatggatg gagatcaacc tgcagaccaa 120
 cctgcagatc gtatgcagga cgacatttca tctgagcagt atcccttggtt tgataagaga 180
 caaaaagtgtt gcactggaa gaaggggtca tgctccggca aagcatgcaa aaatctcaa 240
 tggtgctctg gacgataacg tggtgatgac caactttgtt atcacggcta cgtcaagtgt 300
 ctaatgaata agtaaaaacga ttgcagt 327

<210> 201
 <211> 75
 <212> PRT
 <213> Conus stercusmuscarum

<400> 201
 Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe Pro
 1 5 10 15

Leu Thr Ala Leu Pro Met Asp Gly Asp Gln Pro Ala Asp Gln Pro Ala
 20 25 30

Asp Arg Met Gln Asp Asp Ile Ser Ser Glu Gln Tyr Pro Leu Phe Asp
 35 40 45

Lys Arg Gln Lys Cys Cys Thr Gly Lys Lys Gly Ser Cys Ser Gly Lys
 50 55 60

Ala Cys Lys Asn Leu Lys Cys Cys Ser Gly Arg
 65 70 75

<210> 202
 <211> 23
 <212> PRT
 <213> Conus stercusmuscarum

<220>
 <221> PEPTIDE
 <222> (1)..(23)
 <223> Xaa at residue 1 is Gln or pyro-Glu

<400> 202
 Xaa Lys Cys Cys Thr Gly Lys Gly Ser Cys Ser Gly Lys Ala Cys

1	5	10	15	
---	---	----	----	--

Lys Asn Leu Lys Cys Cys Ser
20

<210> 203
<211> 316
<212> DNA
<213> Conus stercusmuscarum
<400> 203
gatcgatagc agttcgtgat gtctaaactg ggagtcttgt tgaccatctg tctgcttctg 60
tttcccccta ctgctttcc gatggatgga gatcaacctg cagaccaacc tgcagatcg 120
atgcagaacg acatttcattc tgagcagtat cccttggttg ataagagaca aaagtgttgc 180
ggccccggcg cgtcatgccc cagatatttc aaagacaatt ttatttgggg ttgttgttaa 240
atgacaacgt gtcgatgacc aacttcgtta tcacgacttc gccaaagtgtc taatgaataa 300
gtaaaacgat tgca 316

<210> 204
<211> 73
<212> PRT
<213> Conus stercusmuscarum

<400> 204
Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe Pro
1 5 10 15

Leu Thr Ala Leu Pro Met Asp Gly Asp Gln Pro Ala Asp Gln Pro Ala
20 25 30

Asp Arg Met Gln Asn Asp Ile Ser Ser Glu Gln Tyr Pro Leu Phe Asp
35 40 45

Lys Arg Gln Lys Cys Cys Gly Pro Gly Ala Ser Cys Pro Arg Tyr Phe
50 55 60

Lys Asp Asn Phe Ile Cys Gly Cys Cys
65 70

<210> 205
<211> 23
<212> PRT
<213> Conus stercusmuscarum

<220>
<221> PEPTIDE
<222> (1)..(23)
<223> Xaa at residue 1 is Gln or pyro-Glu; Xaa at residue 6 and 11 is P
ro or Hyp; Xaa at residue 13 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-
iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr

<400> 205
Xaa Lys Cys Cys Gly Xaa Gly Ala Ser Cys Xaa Arg Xaa Phe Lys Asp
1 5 10 15

Asn Phe Ile Cys Gly Cys Cys
20

<210> 206
<211> 331
<212> DNA

<213> Conus striatus

<400> 206

cgaccttca	agagggatcg	atagcagttc	gcgatgtcta	aactgggggt	attgttgacc	60
atctgtctgc	ttctgtttcc	ccttactgct	cttccgatgg	atgaagatca	acctgcagac	120
caacttgaag	atcgatgca	ggacgacatt	tcatctgagc	agtatccctc	gtttgttagg	180
agacaaaagt	gttgcggcga	aggctcgta	tgccccaaat	atttcaaaaa	caattttatt	240
tgtggttgtt	gttaaatgac	aacgtgtcga	tgacccaactt	cgttatcacg	actacgccaa	300
gtgtcttgc	taatgataat	aaaatgattc	c			331

<210> 207

<211> 73

<212> PRT

<213> Conus striatus

<400> 207

Met	Ser	Lys	Leu	Gly	Val	Leu	Leu	Thr	Ile	Cys	Leu	Leu	Leu	Phe	Pro
1					5			10					15		

Leu	Thr	Ala	Leu	Pro	Met	Asp	Glu	Asp	Gln	Pro	Ala	Asp	Gln	Leu	Glu
				20			25					30			

Asp	Arg	Met	Gln	Asp	Asp	Ile	Ser	Ser	Glu	Gln	Tyr	Pro	Ser	Phe	Val
		35				40					45				

Arg	Arg	Gln	Lys	Cys	Cys	Gly	Glu	Gly	Ser	Ser	Cys	Pro	Lys	Tyr	Phe
		50				55					60				

Lys	Asn	Asn	Phe	Ile	Cys	Gly	Cys	Cys
65					70			

<210> 208

<211> 23

<212> PRT

<213> Conus striatus

<220>

<221> PEPTIDE

<222> (1)..(23)

<223> Xaa at residue 1 is Gln or pyro-Glu; Xaa at residue 6 is Glu or gamma-carboxy Glu; Xaa at residue 11 is Pro or Hyp; Xaa at residue 13 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr															
---	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

<400> 208

Xaa	Lys	Cys	Cys	Gly	Xaa	Gly	Ser	Ser	Cys	Xaa	Lys	Xaa	Phe	Lys	Asn
1					5				10				15		

Asn	Phe	Ile	Cys	Gly	Cys	Cys
				20		

<210> 209

<211> 256

<212> DNA

<213> Conus striatus

<400> 209

ggatccatga	tgtctaaact	gggagtgcttg	ttgaccgtct	gtctgcttct	gtttcccctt	60
actgctcttc	cgctggatgg	agatcaacct	gcagaccgac	ctgcagagcg	tatgcaggac	120

gacatttcat ctgacgagca tcccttgcgtt gataagagac aaaactgttg caatggggga 180
 tgctccagca aatggtgcag agatcacgca cgttgcgtgcg gtcgatgata acgtgttgc 240
 gaccaacttt ctcgag 256

<210> 210
 <211> 75
 <212> PRT
 <213> Conus striatus

<400> 210
 Gly Ser Met Met Ser Lys Leu Gly Val Leu Leu Thr Val Cys Leu Leu
 1 5 10 15

Leu Phe Pro Leu Thr Ala Leu Pro Leu Asp Gly Asp Gln Pro Ala Asp
 20 25 30

Arg Pro Ala Glu Arg Met Gln Asp Asp Ile Ser Ser Asp Glu His Pro
 35 40 45

Leu Phe Asp Lys Arg Gln Asn Cys Cys Asn Gly Gly Cys Ser Ser Lys
 50 55 60

Trp Cys Arg Asp His Ala Arg Cys Cys Gly Arg
 65 70 75

<210> 211
 <211> 20
 <212> PRT
 <213> Conus striatus

<220>
 <221> PEPTIDE
 <222> (1)..(20)
 <223> Xaa at residue 1 is Gln or pyro-Glu; Xaa at residue 12 is Trp or
 bromo-Trp

<400> 211
 Xaa Asn Cys Cys Asn Gly Gly Cys Ser Ser Lys Xaa Cys Arg Asp His
 1 5 10 15

Ala Arg Cys Cys
 20

<210> 212
 <211> 235
 <212> DNA
 <213> Conus tessulatus

<400> 212
 ggatccatga tgtctaaact gggagtcttg ttgaccatgt gtctgcttct gttccccc 60
 actgctgttc cgctggatgg agatcaacct gcagaccgac ctgcagagcg taggcaggac 120
 attgcaactg acgatcatcc tttgtttgat cccgtcaaac ggtgctgcca caaatgctat 180
 atgggatgca tcccttgcgtt catttagtaa cgttgcgtatg accaactttc tcgag 235

<210> 213
 <211> 68
 <212> PRT
 <213> Conus tessulatus

<400> 213

Gly Ser Met Met Ser Lys Leu Gly Val Leu Leu Thr Met Cys Leu Leu
 1 5 10 15

Leu Phe Pro Leu Thr Ala Val Pro Leu Asp Gly Asp Gln Pro Ala Asp
 20 25 30

Arg Pro Ala Glu Arg Arg Gln Asp Ile Ala Thr Asp Asp His Pro Leu
 35 40 45

Phe Asp Pro Val Lys Arg Cys Cys His Lys Cys Tyr Met Gly Cys Ile
 50 55 60

Pro Cys Cys Ile
 65

<210> 214
 <211> 14
 <212> PRT
 <213> Conus tessulatus

<220>
 <221> PEPTIDE
 <222> (1)..(14)
 <223> Xaa at residue 11 is Pro or Hyp; Xaa at residue 6 is Tyr, 125I-Ty
 r, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr

<400> 214
 Cys Cys His Lys Cys Xaa Met Gly Cys Ile Xaa Cys Cys Ile
 1 5 10

<210> 215
 <211> 238
 <212> DNA
 <213> Conus tessulatus

<400> 215
 ggatccatga tgtctaaact gggagtcgg ttgaccatct gtgtgcttct gttccccc 60
 actgctgttc cgctggatgg agatcaacct gcagaccaac ctgcagagcg tacgcagaac 120
 gagcagcatc ccttgtatga tcagaaaaga aagtgttgcc ggccgccc 180
 tgccatgg cttagtgttg ctattaatga taacgtgttg atgaccaact ttctcgag 238

<210> 216
 <211> 68
 <212> PRT
 <213> Conus tessulatus

<400> 216
 Gly Ser Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Val Leu
 1 5 10 15

Leu Phe Pro Leu Thr Ala Val Pro Leu Asp Gly Asp Gln Pro Ala Asp
 20 25 30

Gln Pro Ala Glu Arg Thr Gln Asn Glu Gln His Pro Leu Tyr Asp Gln
 35 40 45

Lys Arg Lys Cys Cys Arg Pro Pro Cys Ala Met Ser Cys Gly Met Ala
 50 55 60

Arg Cys Cys Tyr
 65

<210> 217
 <211> 18
 <212> PRT
 <213> Conus tessulatus

<220>
 <221> PEPTIDE
 <222> (1)..(18)
 <223> Xaa at residue 5 and 6 is Pro or Hyp; Xaa at residue 18 is Tyr, 1
 25I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Ty
 r

<400> 217
 Lys Cys Cys Arg Xaa Xaa Cys Ala Met Ser Cys Gly Met Ala Arg Cys
 1 5 10 15

Cys Xaa

<210> 218
 <211> 564
 <212> DNA
 <213> Conus textile

<400> 218
 gagtcaaccc actgtcacgc caagagcgg a cggccacagct aaggcaagaa ggatcgatag 60
 cagttcatga tgtctaaact gggagcctt g ttgaccatct gtctacttct gtttccctt 120
 actgctgttc cgctggatgg agatcaacat gcagaccaac ctgcacagcg tctgcaggac 180
 cgcattccaa ctgaagatca tcccttattt gatcccaaca aacggtgttgc cccgcccgtg 240
 gcatgcaaca tggatgcaa gccttgttgt ggatgaccag ctttgttatac gcggtctcat 300
 gaagtgtcta atgaataagt aaaacgattt cagttcgat cagatttgcgtt gttgtatttt 360
 ggtctaaaga ttaatgacca aactgttctt ttgatccgg a tttcacgtt tttctcgatt 420
 cctattcaac actagataag ttaatcacga cagatctgat tttccatcaa tgccttgctt 480
 tttggtctgt catataaatac ttgtttat ttaatttctc gtcactttca acacgcacac 540
 acacacacac acacacgcgc gcgc 564

<210> 219
 <211> 69
 <212> PRT
 <213> Conus textile

<400> 219
 Met Met Ser Lys Leu Gly Ala Leu Leu Thr Ile Cys Leu Leu Leu Phe
 1 5 10 15

Ser Leu Thr Ala Val Pro Leu Asp Gly Asp Gln His Ala Asp Gln Pro
 20 25 30

Ala Gln Arg Leu Gln Asp Arg Ile Pro Thr Glu Asp His Pro Leu Phe
 35 40 45

Asp Pro Asn Lys Arg Cys Cys Pro Pro Val Ala Cys Asn Met Gly Cys
 50 55 60

Lys Pro Cys Cys Gly
 65

<210> 220
 <211> 16
 <212> PRT
 <213> Conus textile

<220>
 <221> PEPTIDE
 <222> (1)..(16)
 <223> Xaa at residue 3, 4 and 13 is Pro or Hyp

<400> 220
 Cys Cys Xaa Xaa Val Ala Cys Asn Met Gly Cys Lys Xaa Cys Cys Gly
 1 5 10 15

<210> 221
 <211> 780
 <212> DNA
 <213> Conus textile

<400> 221
 ggatccagac gacaaagaag agtcaaccca ctgccacgtc aagagcagag cccacagcta 60
 agacaagaag gatcgatagc agttcatgtat gtttaactg ggagtcttgt tgaccatctg 120
 ttccttcgttctg tttccctta atgctgttcc gttggatgga gatcaacctg cagaccaacc 180
 tgcagagcgt ctgctggacg acatttcatt tgaaaataat ccctttatg atcccgccaa 240
 acggtgttgc aggacttgct tcgggtgcac accttggatgttggatgaccag cctcatcaag 300
 tgtctaacga ataagtaaag cgattgcagt ctcgttcaga tttacttttgc tattctggtc 360
 taaagattaa tgaccaaact cttctttga tccggatgta catatatttc tcgattccta 420
 tccaaacgcta gataagctaa tcacgacaga tctgattttc tgtcaatgcc ttgcttttg 480
 gtctctcata tcactcttgtt ttatatttaa tttctcgatca ctatataat atatacacac 540
 acacacacac ggaattccga ttgtccagta ccgttcttgg gatcgaggtt ttgctgcgt 600
 ggcttattct gtactctttt cttctcgct tgatagtgtat gtcttctact cccatctgt 660
 ctacccctgg cttgatctt gataggcgtg tgcccttcac tggttataaa cccctctgtat 720
 cctactctct ggacgcctcg ggggccccaaac ctccaaataa agcgacatcc aatgaaaaaa 780

<210> 222
 <211> 66
 <212> PRT
 <213> Conus textile

<400> 222
 Met Met Phe Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
 1 5 10 15

Ser Leu Asn Ala Val Pro Leu Asp Gly Asp Gln Pro Ala Asp Gln Pro
 20 25 30

Ala Glu Arg Leu Leu Asp Asp Ile Ser Phe Glu Asn Asn Pro Phe Tyr
 35 40 45

Asp Pro Ala Lys Arg Cys Cys Arg Thr Cys Phe Gly Cys Thr Pro Cys
 50 55 60

Cys Gly

65

<210> 223

<211> 12

<212> PRT

<213> Conus textile

<220>

<221> PEPTIDE

<222> (1)..(12)

<223> Xaa at residue 10 is Pro or Hyp

<400> 223

Cys Cys Arg Thr Cys Phe Gly Cys Thr Xaa Cys Cys
1 5 10

<210> 224

<211> 456

<212> DNA

<213> Conus textile

<400> 224

ggaacagtca accccacacgc cacgccaaga gcagacagcc acagctacgt gaagaagggt 60

ggagagaggt tcatgatgtt gaaaatggga gtggtgctat tcatcttct ggtactgttt 120

cccctggcaa cgctccagct ggatgcagat caacctgttag aacgatatgc ggagaacaaa 180

cagctcctca acccagatga aaggagggaa atcctattgc ctgctctgag gaagttctgc 240

tgtgattcga attggtgcca catttcggat tgtgagtgct gctacggta ggcggcaaca 300

tccatggcac tgtgctggc ggtttcatcc caacaacgac agcgttgtt gatttcatgt 360

atcattgcgc ccacgtctct tgtctaagaa tgacgaacat gattgcactc tggttcagat 420

ttcgtgttct tttctgacaa taaatgacaa acctcc 456

<210> 225

<211> 70

<212> PRT

<213> Conus textile

<400> 225

Met Met Leu Lys Met Gly Val Val Leu Phe Ile Phe Leu Val Leu Phe
1 5 10 15Pro Leu Ala Thr Leu Gln Leu Asp Ala Asp Gln Pro Val Glu Arg Tyr
20 25 30Ala Glu Asn Lys Gln Leu Leu Asn Pro Asp Glu Arg Arg Glu Ile Leu
35 40 45Leu Pro Ala Leu Arg Lys Phe Cys Cys Asp Ser Asn Trp Cys His Asp
50 55 60Cys Glu Cys Cys Tyr Gly
65 70

<210> 226

<211> 17

<212> PRT

<213> Conus textile

<220>

<221> PEPTIDE
 <222> (1)..(17)
 <223> Xaa at residue 14 is Glu or gamma-carboxy Glu; Xaa at residue 7 is Trp or bromo-Trp; Xaa at residue 17 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr

<400> 226
 Phe Cys Cys Asp Ser Asn Xaa Cys His Ile Ser Asp Cys Xaa Cys Cys
 1 5 10 15

Xaa

<210> 227
 <211> 456
 <212> DNA
 <213> Conus textile

<220>
 <221> misc_feature
 <222> (1)..(456)
 <223> n may be any nucleotide

<400> 227
 caaggaacag tcaacccac agccacgcca agagcagaca gccacagcta cgtgaagaag 60
 ggtggagaga ggttcgtat gttaaaaatg ggagtggtgc tattcatctt cctggtaactg 120
 tttccctgg caacgctcca gctggatgca gatcaacctg tagaacgata tgcggagaac 180
 aaacagctcc tcagcccaga tgaaaggagg gaaatcatat tgcatgctct ggggacgcga 240
 tgctgttctt gggatgtgtg cgaccacccg agttgtactt gctgcggta gcccgaaca 300
 tccatggcgc tgtgctggc ggtttatcc caacaacgac agcgtttgtt gatttcatgt 360
 atcattgcgc ccacgtctct tgtctaagaa tgacgaacat gattgcactc tggttcagat 420
 ttctgttctt tttctgacaa taaatgacaa aacncc 456

<210> 228
 <211> 70
 <212> PRT
 <213> Conus textile

<400> 228
 Met Leu Lys Met Gly Val Val Leu Phe Ile Phe Leu Val Leu Phe Pro
 1 5 10 15

Leu Ala Thr Leu Gln Leu Asp Ala Asp Gln Pro Val Glu Arg Tyr Ala
 20 25 30

Glu Asn Lys Gln Leu Leu Ser Pro Asp Glu Arg Arg Glu Ile Ile Leu
 35 40 45

His Ala Leu Gly Thr Arg Cys Cys Ser Trp Asp Val Cys Asp His Pro
 50 55 60

Ser Cys Thr Cys Cys Gly
 65 70

<210> 229
 <211> 15
 <212> PRT
 <213> Conus textile

<220>
 <221> PEPTIDE
 <222> (1)..(15)
 <223> Xaa at residue 10 is Pro or Hyp; Xaa at residue 4 is Trp or bromo
 -Trp

<400> 229
 Cys Cys Ser Xaa Asp Val Cys Asp His Xaa Ser Cys Thr Cys Cys
 1 5 10 15

<210> 230
 <211> 235
 <212> DNA
 <213> Conus textile

<400> 230
 ggatccatga tgtctaaact gggagtcttg ttgaccatct gtctgcttct gtttcccctt 60
 actgctcttc cgctggatgg agatcaaccc gcagaccaag ctgcagagcg tatgcaggcc 120
 gagcagcattc ccttggatgg tcagaaaaaga cggtgctgca agttccatg ccccgatagt 180
 tgcagatatt tgtgttgcgg gtgatgataa cgtgttcatg accaactttc tcgag 235

<210> 231
 <211> 67
 <212> PRT
 <213> Conus textile

<400> 231
 Gly Ser Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu
 1 5 10 15

Leu Phe Pro Leu Thr Ala Leu Pro Leu Asp Gly Asp Gln Pro Ala Asp
 20 25 30

Gln Ala Ala Glu Arg Met Gln Ala Glu Gln His Pro Leu Phe Asp Gln
 35 40 45

Lys Arg Arg Cys Cys Lys Phe Pro Cys Pro Asp Ser Cys Arg Tyr Leu
 50 55 60

Cys Cys Gly
 65

<210> 232
 <211> 16
 <212> PRT
 <213> Conus textile

<220>
 <221> PEPTIDE
 <222> (1)..(16)
 <223> Xaa at residue 3 and 8 is Pro or Hyp; Xaa at residue 13 is Tyr, 1
 25I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Ty
 r

<400> 232
 Arg Cys Cys Lys Phe Xaa Cys Xaa Asp Ser Cys Arg Xaa Leu Cys Cys
 1 5 10 15

<210> 233
 <211> 321
 <212> DNA

<213> Conus tulipa
 <400> 233
 cgacctcaag agggatcgat agcagttcat gtctaaactg ggagtcttgt tgacaatctg 60
 tctgcttctg tttccccccta ctgctctgcc gatggatgga gatgaacctg cagaccgacc 120
 tgcagagcgt atgcaggaca acatttcatc tgacgagcat cccttgggg aggagagaca 180
 cggatgttgc aaggggcccg aaggatgctc ctccagagaa tgcagacccc aacattgttgc 240
 cggtcgacga taacgtgttgc agggccaaact ttgttatcac ggctacgtca agtgttttagt 300
 gaataagtaa aatgattgca g 321

 <210> 234
 <211> 74
 <212> PRT
 <213> Conus tulipa

 <400> 234
 Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe Pro
 1 5 10 15
 Leu Thr Ala Leu Pro Met Asp Gly Asp Glu Pro Ala Asp Arg Pro Ala
 20 25 30
 Glu Arg Met Gln Asp Asn Ile Ser Ser Glu Gln His Pro Leu Phe Glu
 35 40 45
 Glu Arg His Gly Cys Cys Lys Gly Pro Glu Gly Cys Ser Ser Arg Glu
 50 55 60
 Cys Arg Pro Gln His Cys Cys Gly Arg Arg
 65 70

 <210> 235
 <211> 21
 <212> PRT
 <213> Conus tulipa

 <220>
 <221> PEPTIDE
 <222> (1)..(21)
 <223> Xaa at residue 8 and 14 is Glu or gamma-carboxy Glu; Xaa at residue 7 and 17 is Pro or Hyp

 <400> 235
 His Gly Cys Cys Lys Gly Xaa Xaa Gly Cys Ser Ser Arg Xaa Cys Arg
 1 5 10 15
 Xaa Gln His Cys Cys
 20

 <210> 236
 <211> 287
 <212> DNA
 <213> Conus figulinus

 <400> 236
 caagaaggat cgatagcagt tcatgatgtc taaactggga gtcttgctga ccatctgtct 60
 gcttctgatt ccccttactg ctcttcgct ggatggagat caacctgcag accgacacctgc 120
 agagcgtatg caggatggaa tttcatctga acagcatccc atgtttgatc ccgtcagacg 180

gtgttgcgg tggccatgca acataggatg cgtaccttgt tggtgatgac cagttttgtt 240
 atcgcggcct catcaaatgt ctaatgaata agtaaaacga ttgcagt 287
 <210> 237
 <211> 67
 <212> PRT
 <213> Conus figulinus

<400> 237
 Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Ile
 1 5 10 15
 Pro Leu Thr Ala Leu Ser Leu Asp Gly Asp Gln Pro Ala Asp Arg Pro
 20 25 30
 Ala Glu Arg Met Gln Asp Gly Ile Ser Ser Glu Gln His Pro Met Phe
 35 40 45
 Asp Pro Val Arg Arg Cys Cys Pro Trp Pro Cys Asn Ile Gly Cys Val
 50 55 60
 Pro Cys Cys
 65

<210> 238
 <211> 14
 <212> PRT
 <213> Conus figulinus

<220>
 <221> PEPTIDE
 <222> (1)..(14)
 <223> Xaa at residue 3, 5 and 12 is Pro or Hyp; Xaa at residue 4 is Trp
 or bromo-Trp

<400> 238
 Cys Cys Xaa Xaa Xaa Cys Asn Ile Gly Cys Val Xaa Cys Cys
 1 5 10

<210> 239
 <211> 283
 <212> DNA
 <213> Conus figulinus

<400> 239
 caagaggat cgatacgagt tcatgatgtt taaactggga gtcctgttga ccatctgtat 60
 gcttctgttt ccctttactg ctcttccgct ggatggagag caacctgcag accaacctgc 120
 agagcgcattt cagtatgaca ttttacgtgc aatgaatccc tggtttgatc ccgtcaaaag 180
 gtgctgctcg aagaactgcg cagttatgcattt cccttggatc ccgttaactga ccagcttgc 240
 tatcgcggcc aaggctctaa tgaataagta aaacgattgc agt 283

<210> 240
 <211> 67
 <212> PRT
 <213> Conus figulinus

<400> 240
 Met Met Phe Lys Leu Gly Val Leu Leu Thr Ile Cys Met Leu Leu Phe
 1 5 10 15
 Pro Phe Thr Ala Leu Pro Leu Asp Gly Glu Gln Pro Ala Asp Gln Pro

20

25

30

Ala Glu Arg Met Gln Tyr Asp Met Leu Arg Ala Met Asn Pro Trp Phe
 35 40 45

Asp Pro Val Lys Arg Cys Cys Ser Lys Asn Cys Ala Val Cys Ile Pro
 50 55 60

Cys Cys Pro
 65

<210> 241
 <211> 14
 <212> PRT
 <213> Conus figulinus

<220>
 <221> PEPTIDE
 <222> (1)..(14)
 <223> Xaa at residue 11 and 14 is Pro or Hyp

<400> 241
 Cys Cys Ser Lys Asn Cys Ala Val Cys Ile Xaa Cys Cys Xaa
 1 5 10

<210> 242
 <211> 286
 <212> DNA
 <213> Conus figulinus

<400> 242
 caagagggat cgatagcagt tcatgatgtc taaactgaga gtcttggta ccttatgtct 60
 gttctgttt ccccttactg ctcttccgct gaatgaagat caacctgcag agcgtatgca 120
 ggacgacaat tcatctgagc agcaccctt gtatgaccac aaacgaaagt gttgccggtg 180
 gccatgcccc gcaagatgct gctttgtt cctgtaataa cgtgtggcc aactttgtta 240
 tcacggccac gtcaaatgtt taatgaataa gtaaaacgat tgcagt 286

<210> 243
 <211> 64
 <212> PRT
 <213> Conus figulinus

<400> 243
 Met Met Ser Lys Leu Arg Val Leu Leu Thr Leu Cys Leu Leu Leu Phe
 1 5 10 15

Pro Leu Thr Ala Leu Pro Leu Asn Glu Asp Gln Pro Ala Glu Arg Met
 20 25 30

Gln Asp Asp Asn Ser Ser Glu Gln His Pro Leu Tyr Asp His Lys Arg
 35 40 45

Lys Cys Cys Arg Trp Pro Cys Pro Ala Arg Cys Gly Ser Cys Cys Leu
 50 55 60

<210> 244
 <211> 15
 <212> PRT
 <213> Conus figulinus

<220>

<221> PEPTIDE
 <222> (1)..(15)
 <223> Xaa at residue 5 and 7 is Pro or Hyp; Xaa at residue 4 is Trp or
 bromo-Trp

<400> 244
 Cys Cys Arg Xaa Xaa Cys Xaa Ala Arg Cys Gly Ser Cys Cys Leu
 1 5 10 15

<210> 245
 <211> 301
 <212> DNA
 <213> Conus figulinus

<400> 245
 caagagggat cgatagcagt tcatgatgtc taaactggga gtcttgttga ccttatgtct 60
 gcttctgttt cccctgactg ctcttccgct ggatgaagat caagctgcag accgacacctgc 120
 agagcgtatg cagggcatgt catctgaaca gcaccccttc tttgatcccg tcaaacggtg 180
 ttgcgagttg tcacgctgcc ttggatgcgt cccttgttgc acatcttaat aacgtgtgga 240
 tgaccaactg tgttatcacy gccacgtcaa gtgtctaatt aataagtaaa atgattgcag 300
 t 301

<210> 246
 <211> 68
 <212> PRT
 <213> Conus figulinus

<400> 246
 Met Met Ser Lys Leu Gly Val Leu Leu Thr Leu Cys Leu Leu Leu Phe
 1 5 10 15

Pro Leu Thr Ala Leu Pro Leu Asp Glu Asp Gln Ala Ala Asp Arg Pro
 20 25 30

Ala Glu Arg Met Gln Gly Met Ser Ser Glu Gln His Pro Phe Phe Asp
 35 40 45

Pro Val Lys Arg Cys Cys Glu Leu Ser Arg Cys Leu Gly Cys Val Pro
 50 55 60

Cys Cys Thr Ser
 65

<210> 247
 <211> 16
 <212> PRT
 <213> Conus figulinus

<220>
 <221> PEPTIDE
 <222> (1)..(16)
 <223> Xaa at residue 3 and 12 is Pro or Hyp

<400> 247
 Cys Cys Xaa Leu Ser Arg Cys Leu Gly Cys Val Xaa Cys Cys Thr Ser
 1 5 10 15

<210> 248
 <211> 301
 <212> DNA

<213> Conus figulinus

<400> 248
 caagagggat cgatacgagt tcatgatgtc taaaactggga gtcttggta ccttatgtct 60
 gcttctgttt cccctgactg ctcttccgct ggatgaagat caacctgcag accgacctgc 120
 agagcgtatg cagggcatgt catctgaaca gcatcccttc tttgatcccg tcaaacggtg 180
 ttgcgagttg tcaaaaatgcc atggatgcgt cccttggta ataccttaat aacgtgcgga 240
 tgaccaactg tgttatcactg gccacgtcaa gtgtctaattg aataagtaaa atgattgcag 300
 t 301

<210> 249

<211> 68

<212> PRT

<213> Conus figulinus

<400> 249

Met Met Ser Lys Leu Gly Val Leu Leu Thr Leu Cys Leu Leu Leu Phe
 1 5 10 15

Pro Leu Thr Ala Leu Pro Leu Asp Glu Asp Gln Pro Ala Asp Arg Pro
 20 25 30

Ala Glu Arg Met Gln Gly Met Ser Ser Glu Gln His Pro Phe Phe Asp
 35 40 45

Pro Val Lys Arg Cys Cys Glu Leu Ser Lys Cys His Gly Cys Val Pro
 50 55 60

Cys Cys Ile Pro
 65

<210> 250

<211> 16

<212> PRT

<213> Conus figulinus

<220>

<221> PEPTIDE

<222> (1)..(16)

<223> Xaa at residue 3 is Glu or gamma-carboxy Glu; Xaa at residue 12 and 16 is Pro or Hyp

<400> 250

Cys Cys Xaa Leu Ser Lys Cys His Gly Cys Val Xaa Cys Cys Ile Xaa
 1 5 10 15

<210> 251

<211> 298

<212> DNA

<213> Conus querceanus

<400> 251

caagagggat cgatacgagt tcatgatgtc taaaactcgga gtcttggta ccatctgtct 60

ggttctgttt ccccttacag ctcttcagct ggatggagat caacctgcag accgacctgc 120

agagcgtacg caggacattt catctgaaca gtatcgaaag tttgatcaga gacagaggtg 180
 ttgcgggtgg ccatgccccg gtagttgcag atgctgccgt tatcgtaac gtgtggta 240

ccagcttgc tatcacgacc acgccaagtg tctaacgaat aagtaaaatg attgcagt 298

<210> 252

<211> 68

<212> PRT

<213> Conus quercinus

<400> 252

Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Val Leu Phe
1 5 10 15Pro Leu Thr Ala Leu Gln Leu Asp Gly Asp Gln Pro Ala Asp Arg Pro
20 25 30Ala Glu Arg Thr Gln Asp Ile Ser Ser Glu Gln Tyr Arg Lys Phe Asp
35 40 45Gln Arg Gln Arg Cys Cys Arg Trp Pro Cys Pro Gly Ser Cys Arg Cys
50 55 60

Cys Arg Tyr Arg

65

<210> 253

<211> 18

<212> PRT

<213> Conus quercinus

<220>

<221> PEPTIDE

<222> (1)..(18)

<223> Xaa at residue 1 is Gln or pyro-Glu; Xaa at residue 7 and 9 is Pro
o or Hyp; Xaa at residue 6 is Trp or bromo-Trp; Xaa at residue 17
is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-
phospho-Tyr

<400> 253

Xaa Arg Cys Cys Arg Xaa Xaa Cys Xaa Gly Ser Cys Arg Cys Cys Arg
1 5 10 15

Xaa Arg

<210> 254

<211> 313

<212> DNA

<213> Conus quercinus

<400> 254

caagagggat cgatagcagt tcatgatgtc taaactggga gtcttggta ccatctgtct 60

gcttcgttt ccccttactg ctcttccact ggatggagat caacctgcag atcaatctgc 120

agagcgacct gcagagcgta cgcaggacga cattcagcag catccgttat atgatccgaa 180

aagaaggtgt tgccgttatac catgccccga cagctgccac ggatcttgct gctataagt 240

ataacatgtt gatggccagc tttgttatca cggccacgtc aagtgtctaa tgaataaga 300

aaacgattgc agt 313

<210> 255

<211> 72

<212> PRT

<213> Conus quercinus

<400> 255

Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
 1 5 10 15

Pro Leu Thr Ala Leu Pro Leu Asp Gly Asp Gln Pro Ala Asp Gln Ser
 20 25 30

Ala Glu Arg Pro Ala Glu Arg Thr Gln Asp Asp Ile Gln Gln His Pro
 35 40 45

Leu Tyr Asp Pro Lys Arg Arg Cys Cys Arg Tyr Pro Cys Pro Asp Ser
 50 55 60

Cys His Gly Ser Cys Cys Tyr Lys
 65 70

<210> 256

<211> 18

<212> PRT

<213> Conus quercinus

<220>

<221> PEPTIDE

<222> (1)..(18)

<223> Xaa at residue 6 and 8 is Pro or Hyp; Xaa at residue 5 and 17 is
 Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phos-
 pho-Tyr

<400> 256

Arg Cys Cys Arg Xaa Xaa Cys Xaa Asp Ser Cys His Gly Ser Cys Cys
 1 5 10 15

Xaa Lys

<210> 257

<211> 256

<212> DNA

<213> Conus wittigi

<400> 257

ggatccatga tgtctaaact gggagtcttg ttgaccatct gtctgcttct gtttcccatt 60

actgctcttc cggtggttgg agatcagcct gcagaccgac ttgcagagcg tatgcaggac 120

gacacttcat ctgagcagca tcccttgaa aagagactac catcatgttgc gactttgag 180

aggcttgcg tagtaccagc atgcatacgt catcagtgtt gcacaggata acgtgttgc 240

gaccaacttt ctcgag 256

<210> 258

<211> 74

<212> PRT

<213> Conus wittigi

<400> 258

Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
 1 5 10 15

Pro Ile Thr Ala Leu Pro Val Gly Gly Asp Gln Pro Ala Asp Arg Leu
 20 25 30

Ala Glu Arg Met Gln Asp Asp Thr Ser Ser Glu Gln His Pro Phe Glu
 35 40 45

Lys Arg Leu Pro Ser Cys Cys Asp Phe Glu Arg Leu Cys Val Val Pro
 50 55 60

Ala Cys Ile Arg His Gln Cys Cys Thr Gly
 65 70

<210> 259
 <211> 23
 <212> PRT
 <213> Conus wittigi

<220>
 <221> PEPTIDE
 <222> (1)..(23)
 <223> Xaa at residue 8 is Glu or gamma-carboxy Glu; Xaa at residue 2 and 14 is Pro or Hyp

<400> 259
 Leu Xaa Ser Cys Cys Asp Phe Xaa Arg Leu Cys Val Val Xaa Ala Cys
 1 5 10 15

Ile Arg His Gln Cys Cys Thr
 20

<210> 260
 <211> 14
 <212> PRT
 <213> Conus betulinus

<220>
 <221> PEPTIDE
 <222> (1)..(14)
 <223> Xaa at residue 11 is Pro or Hyp; Xaa at residue 14 is Trp or bromo-Trp

<400> 260
 Cys Cys Lys Gln Ser Cys Thr Thr Cys Met Xaa Cys Cys Xaa
 1 5 10

<210> 261
 <211> 259
 <212> DNA
 <213> Conus tulipa

<220>
 <221> misc_feature
 <222> (1)..(259)
 <223> n may be any nucleotide

<400> 261
 ggatccatga tgtctaaact gggagtcttg ttgacaatct gtctgcttct gttcccccctt 60
 actgctctgc cgatggatgg agatgaacct gcagaccgac ctgcagagcg tatgcaggac 120
 aacatttcat ctgagcagca tcccttgaaa gaggagagac acggatgttg cgagggggccg 180
 aaggatgtt cctccagaga atgcagaccc caacattgtt gcggtcgacg ataacgttt 240
 gatgaccaac tntctcgag 259

<210> 262
 <211> 75
 <212> PRT
 <213> Conus tulipa

<400> 262
 Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe

1	5	10	15
---	---	----	----

Pro Leu Thr Ala Leu Pro Met Asp Gly Asp Glu Pro Ala Asp Arg Pro
 20 25 30

Ala Glu Arg Met Gln Asp Asn Ile Ser Ser Glu Gln His Pro Leu Phe
 35 40 45

Glu Glu Arg His Gly Cys Cys Glu Gly Pro Lys Gly Cys Ser Ser Arg
 50 55 60

Glu Cys Arg Pro Gln His Cys Cys Gly Arg Arg
 65 70 75

<210> 263
<211> 21
<212> PRT
<213> Conus tulipa

<220>
<221> PEPTIDE
<222> (1)..(21)
<223> Xaa at residue 5 and 14 is Glu or gamma-carboxy Glu; Xaa at residue 7 and 17 is Pro or Hyp

<400> 263
His Gly Cys Cys Xaa Gly Xaa Lys Gly Cys Ser Ser Arg Xaa Cys Arg
1 5 10 15

Xaa Gln His Cys Cys
20

<210> 264
<211> 262
<212> DNA
<213> Conus aurisiacus

<220>
<221> misc_feature
<222> (1)..(262)
<223> n may be any nucleotide

<400> 264
ggatccatga tgtctaaact gggagtcttg ttgaccatct gtctacttct gtttcccctt 60
actgctttc ccatggatgg agatcaacct gcagaccaac ctgcagatcg tatgcaggac 120
gacatttcat ctgagcagta tcccttggtt gataagagac aaaagtgttg cactggagg 180
aaggggatcat gctccggcaa agcatgcaaa aatctcaaatt gttgctctgg acgataacgt 240
gttcatgacc aactttctcg an 262

<210> 265
<211> 76
<212> PRT
<213> Conus aurisiacus

<400> 265
Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
1 5 10 15

Pro Leu Thr Ala Phe Pro Met Asp Gly Asp Gln Pro Ala Asp Gln Pro
20 25 30

Ala Asp Arg Met Gln Asp Asp Ile Ser Ser Glu Gln Tyr Pro Leu Phe
 35 40 45

Asp Lys Arg Gln Lys Cys Cys Thr Gly Arg Lys Gly Ser Cys Ser Gly
 50 55 60

Lys Ala Cys Lys Asn Leu Lys Cys Cys Ser Gly Arg
 65 70 75

<210> 266
 <211> 23
 <212> PRT
 <213> Conus aurisiacus

<220>
 <221> PEPTIDE
 <222> (1)..(23)
 <223> Xaa at residue 1 is Gln or pyro-Glu

<400> 266
 Xaa Lys Cys Cys Thr Gly Arg Lys Gly Ser Cys Ser Gly Lys Ala Cys
 1 5 10 15

Lys Asn Leu Lys Cys Cys Ser
 20

<210> 267
 <211> 239
 <212> DNA
 <213> Conus betulinus

<400> 267
 ggatccatga tgtctaaact gggagtccttg ttgaccatct gtctgcttct gtttccctt 60
 actgctgttc cggtggatgg agatcaacct gcagaccaac ctgcagagcg tatgcagaac 120
 gagcagcatc cctcgtttga tcagaaaaga aggtgctgcc ggtggccatg ccccaagtata 180
 tgcggcatgg ctaggtgttg cttcgatcatg ataacgtgtt gatgaccaac tttctcgag 239

<210> 268
 <211> 71
 <212> PRT
 <213> Conus betulinus

<400> 268
 Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
 1 5 10 15

Pro Leu Thr Ala Val Pro Leu Asp Gly Asp Gln Pro Ala Asp Gln Pro
 20 25 30

Ala Glu Arg Met Gln Asn Glu Gln His Pro Ser Phe Asp Gln Lys Arg
 35 40 45

Arg Cys Cys Arg Trp Pro Cys Pro Ser Ile Cys Gly Met Ala Arg Cys
 50 55 60

Cys Phe Val Met Ile Thr Cys
 65 70

<210> 269
 <211> 23
 <212> PRT
 <213> Conus betulinus

<220>
 <221> PEPTIDE
 <222> (1)..(23)
 <223> Xaa at residue 6 and 8 is Pro or Hyp; Xaa at residue 5 is Trp or
 bromo-Trp

<400> 269
 Arg Cys Cys Arg Xaa Xaa Cys Xaa Ser Ile Cys Gly Met Ala Arg Cys
 1 5 10 15

Cys Phe Val Met Ile Thr Cys
 20

<210> 270
 <211> 226
 <212> DNA
 <213> Conus betulinus

<220>
 <221> misc_feature
 <222> (1)..(226)
 <223> n may be any nucleotide

<400> 270
 ggatccatga tgtctaaact gggagtcttg ttgatcatct gtctgttct gtttccccctt 60
 actgctgttc cgctggatgg agatcagcct gcagagcgta cgcagatcga gcagcatccc 120
 ttgtttgacc agaaaagaag gtgttgcggg tggccatgcc ccagtagatg cggcatggct 180
 aggtgttgct tcgtcatgat aacgtgttga tgancgacct ctcnag 226

<210> 271
 <211> 67
 <212> PRT
 <213> Conus betulinus

<400> 271
 Met Met Ser Lys Leu Gly Val Leu Leu Ile Ile Cys Leu Leu Leu Phe
 1 5 10 15

Pro Leu Thr Ala Val Pro Leu Asp Gly Asp Gln Pro Ala Glu Arg Thr
 20 25 30

Gln Ile Glu Gln His Pro Leu Phe Asp Gln Lys Arg Arg Cys Cys Arg
 35 40 45

Trp Pro Cys Pro Ser Arg Cys Gly Met Ala Arg Cys Cys Phe Val Met
 50 55 60

Ile Thr Cys
 65

<210> 272
 <211> 23
 <212> PRT
 <213> Conus betulinus

<220>
 <221> PEPTIDE
 <222> (1)..(23)
 <223> Xaa at residue 6 and 8 is Pro or Hyp; Xaa at residue 5 is Trp or
 bromo-Trp

<400> 272

Arg Cys Cys Arg Xaa Xaa Cys Xaa Ser Arg Cys Gly Met Ala Arg Cys
 1 5 10 15

Cys Phe Val Met Ile Thr Cys
 20

<210> 273
 <211> 262
 <212> DNA
 <213> Conus parius

<400> 273
 ggatccatga tgtctaaact gggagtcgg ttgaccatct gtctgcttct gtttccccctt 60
 actgctcttc ccatggatgg tgcataacct gcagaccgac ttgttagagcg tatgcaggac 120
 aacatttcat ctgagcagca tcccttcttt gaaaagagaa gaggaggctg ttgcacacct 180
 ccgaagaaat gcaaagaccg agcctgcaaa cctgcacggtt gctgcggccc aggataacgt 240
 gttgatgacc aactttctcg cc 262

<210> 274
 <211> 76
 <212> PRT
 <213> Conus parius

<400> 274
 Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
 1 5 10 15

Pro Leu Thr Ala Leu Pro Met Asp Gly Asp Gln Pro Ala Asp Arg Leu
 20 25 30

Val Glu Arg Met Gln Asp Asn Ile Ser Ser Glu Gln His Pro Phe Phe
 35 40 45

Glu Lys Arg Arg Gly Gly Cys Cys Thr Pro Pro Lys Lys Cys Lys Asp
 50 55 60

Arg Ala Cys Lys Pro Ala Arg Cys Cys Gly Pro Gly
 65 70 75

<210> 275
 <211> 24
 <212> PRT
 <213> Conus parius

<220>
 <221> PEPTIDE
 <222> (1)...(24)
 <223> Xaa at residue 7, 8, 18 and 24 is Pro or Hyp

<400> 275
 Arg Gly Gly Cys Cys Thr Xaa Xaa Lys Lys Cys Lys Asp Arg Ala Cys
 1 5 10 15

Lys Xaa Ala Arg Cys Cys Gly Xaa
 20

<210> 276
 <211> 259
 <212> DNA
 <213> Conus parius

<400> 276
 ggatccatga tgtctaaact gggagtcttg ttgaccatct gtctgttct gttcccccctt 60
 actgctcttc cgatggatgg tgcataacacct gcagaccgac ttgttagagcg tatgcaggac 120
 aacatttcat ctgagcagca tcccttcttt gaaaagagaa gaggctgttg cacacccctcg 180
 aggaaatgca aagaccgagc ctgcaaacct gcacgttggt gcgcccagg ataacgttt 240
 gatgaccaac tttctcgag 259

<210> 277
 <211> 75
 <212> PRT
 <213> Conus parius

<400> 277
 Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
 1 5 10 15

Pro Leu Thr Ala Leu Pro Met Asp Gly Asp Gln Pro Ala Asp Arg Leu
 20 25 30

Val Glu Arg Met Gln Asp Asn Ile Ser Ser Glu Gln His Pro Phe Phe
 35 40 45

Glu Lys Arg Arg Gly Cys Cys Thr Pro Pro Arg Lys Cys Lys Asp Arg
 50 55 60

Ala Cys Lys Pro Ala Arg Cys Cys Gly Pro Gly
 65 70 75

<210> 278
 <211> 23
 <212> PRT
 <213> Conus parius

<220>
 <221> PEPTIDE
 <222> (1)..(23)
 <223> Xaa at residue 6, 7, 17 and 23 is Pro or Hyp

<400> 278
 Arg Gly Cys Cys Thr Xaa Xaa Arg Lys Cys Lys Asp Arg Ala Cys Lys
 1 5 10 15

Xaa Ala Arg Cys Cys Gly Xaa
 20

<210> 279
 <211> 241
 <212> DNA
 <213> Conus coronatus

<400> 279
 ggatccatga tgtctaaact gggagtcttg ttgaccatct gtctgttct gttcccaatt 60
 actgcccttc cgctggatga agatcaacacct gcagaccgac ctgcagagcg tatgcaggac 120
 attgcaactg aacagcatcc cttgtttgat cccgtcaaac ggtgctgcga ttggccatgc 180
 atcccaggat gcaccccttg ttgcttgcct tgataacgtg ttgatgacca actttctcg 240
 g 241

<210> 280

<211> 68

<212> PRT

<213> Conus coronatus

<400> 280

Met	Met	Ser	Lys	Leu	Gly	Val	Leu	Leu	Thr	Ile	Cys	Leu	Leu	Leu	Phe
1				5					10					15	

Pro	Ile	Thr	Ala	Leu	Pro	Leu	Asp	Glu	Asp	Gln	Pro	Ala	Asp	Arg	Pro
				20				25					30		

Ala	Glu	Arg	Met	Gln	Asp	Ile	Ala	Thr	Glu	Gln	His	Pro	Leu	Phe	Asp
			35				40				45				

Pro	Val	Lys	Arg	Cys	Cys	Asp	Trp	Pro	Cys	Ile	Pro	Gly	Cys	Thr	Pro
	50				55					60					

Cys	Cys	Leu	Pro
	65		

<210> 281

<211> 16

<212> PRT

<213> Conus coronatus

<220>

<221> PEPTIDE

<222> (1)..(16)

<223> Xaa at residue 5, 8, 12 and 16 is Pro or Hyp; Xaa at residue 4 is	
Trp or bromo-Trp	

<400> 281

Cys	Cys	Asp	Xaa	Xaa	Cys	Ile	Xaa	Gly	Cys	Thr	Xaa	Cys	Cys	Leu	Xaa
1				5				10				15			

<210> 282

<211> 244

<212> DNA

<213> Conus musicus

<400> 282

ggatccatga tgtctaaact gggagtccctg ttgaccatct gtctgcttct gtttcctctt 60

tctgctcttc cgatggatga agatcaactt gcagacctac ctgcagagcg tatgcgggac 120

actgcaactg tagatcatcc ctcctatgtat cctgacaaag cgtgctgcga gcagagctgt 180

acaacatgct ttccgtgctg ctagccttga acacagtaac gtgttgatga ccaactttct 240

cgag 244

<210> 283

<211> 65

<212> PRT

<213> Conus musicus

<400> 283

Met	Met	Ser	Lys	Leu	Gly	Val	Leu	Leu	Thr	Ile	Cys	Leu	Leu	Phe
1				5				10					15	

Pro	Leu	Ser	Ala	Leu	Pro	Met	Asp	Glu	Asp	Gln	Leu	Ala	Asp	Leu	Pro
				20				25				30			

Ala Glu Arg Met Arg Asp Thr Ala Thr Val Asp His Pro Ser Tyr Asp

35	40	45
Pro Asp Lys Ala Cys Cys Glu Gln Ser Cys Thr Thr Cys Phe Pro Cys		
50	55	60
Cys		
65		
<210> 284		
<211> 14		
<212> PRT		
<213> Conus musicus		
<220>		
<221> PEPTIDE		
<222> (1)..(14)		
<223> Xaa at residue 4 is Glu or gamma-carboxy Glu; Xaa at residue 12 is Pro or Hyp		
<400> 284		
Ala Cys Cys Xaa Gln Ser Cys Thr Thr Cys Phe Xaa Cys Cys		
1	5	10
<210> 285		
<211> 14		
<212> PRT		
<213> Conus betulinus		
<220>		
<221> PEPTIDE		
<222> (1)..(14)		
<223> Xaa at residue 4 is Glu or gamma-carboxy Glu; Xaa at residue 12 is Pro or Hyp		
<400> 285		
Ala Cys Cys Xaa Gln Ser Cys Thr Thr Cys Met Xaa Cys Cys		
1	5	10
<210> 286		
<211> 14		
<212> PRT		
<213> Conus betulinus		
<220>		
<221> PEPTIDE		
<222> (1)..(14)		
<223> Xaa at residue 3 is Glu or gamma-carboxy Glu; Xaa at residue 11 is Pro or Hyp; Xaa at residue 14 is Trp or bromo-Trp		
<400> 286		
Cys Cys Xaa Gln Ser Cys Thr Thr Cys Met Xaa Cys Cys Xaa		
1	5	10
<210> 287		
<211> 235		
<212> DNA		
<213> Conus pennaceus		
<400> 287		
ggatccatga tgtctaaact gggagtcttg ttgaccatct gtctgcttct gtttcccctt		60
actgctcttc cgctggatgg agatcaacct gcataccaag ctgcagagcg tatgcaggcc		120
gagcatcatc ccttgtttga tcagaaaaga cggtgctgca agtttccatg ccccgatagt		180
tgcaaatatt tgtgttgcgg qtgtatgataa catgttgatg accaactttc ttqag		235

<210> 288

<211> 65

<212> PRT

<213> Conus pennaceus

<400> 288

Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
1 5 10 15Pro Leu Thr Ala Leu Pro Leu Asp Gly Asp Gln Pro Ala Tyr Gln Ala
20 25 30Ala Glu Arg Met Gln Ala Glu His His Pro Leu Phe Asp Gln Lys Arg
35 40 45Arg Cys Cys Lys Phe Pro Cys Pro Asp Ser Cys Lys Tyr Leu Cys Cys
50 55 60

Gly

65

<210> 289

<211> 16

<212> PRT

<213> Conus pennaceus

<220>

<221> PEPTIDE

<222> (1)..(16)

<223> Xaa at residue 6 and 8 is Pro or Hyp; Xaa at residue 13 is Tyr, 1
25I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Ty
r

<400> 289

Arg Cys Cys Lys Phe Xaa Cys Xaa Asp Ser Cys Lys Xaa Leu Cys Cys
1 5 10 15

<210> 290

<211> 241

<212> DNA

<213> Conus pulicarius

<400> 290

ggatccatga tgtctaaact gggagtcttg ttgaccatct gtctgcttct gtttccctt 60

actgctcttc ccatggatgg tcatcaactt gcagaccgac ttgttagagcg tatgcaggac 120

aacatttcat ctgagcagca tcccttcttt gatcccgta aacggtgttgcgtcagctgt 180

tacatggat gcatcccttg ttgcttcttag taataacgtg ttgatgacca actttctcga 240
g 241

<210> 291

<211> 67

<212> PRT

<213> Conus pulicarius

<400> 291

Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
1 5 10 15Pro Leu Thr Ala Leu Pro Met Asp Gly Asp Gln Leu Ala Asp Arg Leu
20 25 30

Val Glu Arg Met Gln Asp Asn Ile Ser Ser Glu Gln His Pro Phe Phe
 35 40 45

Asp Pro Val Lys Arg Cys Cys Val Ser Cys Tyr Met Gly Cys Ile Pro
 50 55 60

Cys Cys Phe
 65

<210> 292
 <211> 14
 <212> PRT
 <213> Conus pulicarius

<220>
 <221> PEPTIDE
 <222> (1)..(14)
 <223> Xaa at residue 11 is Pro or Hyp; Xaa at residue 6 is Tyr, 125I-Ty
 r, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr

<400> 292
 Cys Cys Val Ser Cys Xaa Met Gly Cys Ile Xaa Cys Cys Phe
 1 5 10

<210> 293
 <211> 244
 <212> DNA
 <213> Conus pulicarius

<400> 293
 ggatccatga tgtctaaact gggagtcttg ttgaccgtct gtctgcttct gtgtccccctt 60
 actgctcttc cactggatga agatcaactt gcagaccgac ctgcagagcg tatgcaggat 120
 gacacttcag ctgcacagat tttcgggttt gatcccgta aacggtgctg caaattgcta 180
 tgctactcgg gatgcactcc ttgttgcacat atttgataac gtgttgatga ccaactttct 240
 cgag 244

<210> 294
 <211> 67
 <212> PRT
 <213> Conus pulicarius

<400> 294
 Met Met Ser Lys Leu Gly Val Leu Leu Thr Val Cys Leu Leu Cys
 1 5 10 15

Pro Leu Thr Ala Leu Pro Leu Asp Glu Asp Gln Leu Ala Asp Arg Pro
 20 25 30

Ala Glu Arg Met Gln Asp Asp Thr Ser Ala Ala Gln Ile Phe Gly Phe
 35 40 45

Asp Pro Val Lys Arg Cys Cys Lys Leu Leu Cys Gly Cys Thr Pro Cys
 50 55 60

Cys His Ile
 65

<210> 295
 <211> 16
 <212> PRT
 <213> Conus pulicarius

<220>
 <221> PEPTIDE
 <222> (1)..(16)
 <223> Xaa at residue 12 is Pro or Hyp; Xaa at residue 7 is Tyr, 125I-Tyr
 r, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr

<400> 295
 Cys Cys Lys Leu Leu Cys Xaa Ser Gly Cys Thr Xaa Cys Cys Cys His Ile
 1 5 10 15

<210> 296
 <211> 259
 <212> DNA
 <213> Conus rattus

<400> 296
 ggatccatga tgtctaaact gggagtcttg ttgaccatct gtctgcttgt gtttccgctt 60
 actgctcttc ccatggatgg tgcataacct gcagaccgac ttgttagagcg tatacaggac 120
 aacatttcat ctgagcagca tcccttcttt gaaaagagaa gaggctgttg cgcacccctccg 180
 aggaaatgca aagaccgagc ctgcaaacct gcacgttgct gcggcccaagg ataacgtgtt 240
 gatgaccaac tttctcgag 259

<210> 297
 <211> 75
 <212> PRT
 <213> Conus rattus

<400> 297
 Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Val Phe
 1 5 10 15

Pro Leu Thr Ala Leu Pro Met Asp Gly Asp Gln Pro Ala Asp Arg Leu
 20 25 30

Val Glu Arg Ile Gln Asp Asn Ile Ser Ser Glu Gln His Pro Phe Phe
 35 40 45

Glu Lys Arg Arg Gly Cys Cys Ala Pro Pro Arg Lys Cys Lys Asp Arg
 50 55 60

Ala Cys Lys Pro Ala Arg Cys Cys Gly Pro Gly
 65 70 75

<210> 298
 <211> 23
 <212> PRT
 <213> Conus rattus

<220>
 <221> PEPTIDE
 <222> (1)..(23)
 <223> Xaa at residue 6, 7, 17 and 23 is Pro or Hyp

<400> 298
 Arg Gly Cys Cys Ala Xaa Xaa Arg Lys Cys Lys Asp Arg Ala Cys Lys
 1 5 10 15

Xaa Ala Arg Cys Cys Gly Xaa
 20

<210> 299
 <211> 262
 <212> DNA
 <213> Conus stercusmuscarum

<400> 299
 ggatccatga tgtctaaact gggagtcctg ttgacaatct gtctgcttct gttcccccctt 60
 attgctcttc cgctggatgg agatcaaccc gcagaccgac ctgcagagcg tatgcaggac 120
 gacatttcat ctgagaagca tcccttgttt gataagagac aacgggtttg caatgggcgg 180
 aggggatgtt ccagcagatg gtgcagagat cactcacgtt gttgcggtcg acgataacgt 240
 gttgatgacc aactttctcg ag 262

<210> 300
 <211> 76
 <212> PRT
 <213> Conus stercusmuscarum

<400> 300
 Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
 1 5 10 15

Pro Leu Ile Ala Leu Pro Leu Asp Gly Asp Gln Pro Ala Asp Arg Pro
 20 25 30

Ala Glu Arg Met Gln Asp Asp Ile Ser Ser Glu Lys His Pro Leu Phe
 35 40 45

Asp Lys Arg Gln Arg Cys Cys Asn Gly Arg Arg Gly Cys Ser Ser Arg
 50 55 60

Trp Cys Arg Asp His Ser Arg Cys Cys Gly Arg Arg
 65 70 75

<210> 301
 <211> 22
 <212> PRT
 <213> Conus stercusmuscarum

<220>
 <221> PEPTIDE
 <222> (1)..(22)
 <223> Xaa at residue 1 is Gln or pyro-Glu; Xaa at residue 14 is Trp or
 bromo-Trp

<400> 301
 Xaa Arg Cys Cys Asn Gly Arg Arg Gly Cys Ser Ser Arg Xaa Cys Arg
 1 5 10 15

Asp His Ser Arg Cys Cys
 20

<210> 302
 <211> 241
 <212> DNA
 <213> Conus ebraceus

<400> 302
 ggatccatga tgtctaaact gggagtcctg ttgaccatct gtctgcttct gttcccccctt 60
 actgctcttc cactggatga aggtcaaccc gcagacctac ctgcagagcg tatgcaggac 120

attgcaactg aacagcatcc cttgtttgat cctgtcaaac ggtgtgcga gcagccatgc 180
 tacatggat gcatcccttg ttgcttctaa taataacgtg ttgatgacca actttctcga 240
 g 241
 <210> 303
 <211> 67
 <212> PRT
 <213> Conus ebraceus
 <400> 303
 Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Phe
 1 5 10 15
 Pro Leu Thr Ala Leu Pro Leu Asp Glu Gly Gln Pro Ala Asp Leu Pro
 20 25 30
 Ala Glu Arg Met Gln Asp Ile Ala Thr Glu Gln His Pro Leu Phe Asp
 35 40 45
 Pro Val Lys Arg Cys Cys Glu Gln Pro Cys Tyr Met Gly Cys Ile Pro
 50 55 60
 Cys Cys Phe
 65
 <210> 304
 <211> 15
 <212> PRT
 <213> Conus ebraceus
 <220>
 <221> PEPTIDE
 <222> (1)..(15)
 <223> Xaa at residue 3 is Glu or gamma-carboxy Glu; Xaa at residue 5 and 12 is Pro or Hyp; Xaa at residue 7 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr
 <400> 304
 Cys Cys Xaa Gln Xaa Cys Xaa Met Gly Cys Ile Xaa Cys Cys Phe
 1 5 10 15
 <210> 305
 <211> 241
 <212> DNA
 <213> Conus ebraceus
 <400> 305
 ggatccatga tgtctaaact gggagtcttg ttgaccatct gtctgcttct gttccccc 60
 actgctcttc cactggatga agatcaacct gcagacctac ctgcagagcg tatgcaggac 120
 attgcaactg aacagcatcc cttgtttgat cctgtcaaac ggtgctgcgc gcagccatgc 180
 tacatggat gcatcccttg ttgcttctaa taataacgtg ttgatgacca actttctcga 240
 g 241
 <210> 306
 <211> 67
 <212> PRT
 <213> Conus ebraceus
 <400> 306
 Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Phe

1	5	10	15
Pro Leu Thr Ala Leu Pro Leu Asp Glu Asp Gln Pro Ala Asp Leu Pro			
20	25	30	
Ala Glu Arg Met Gln Asp Ile Ala Thr Glu Gln His Pro Leu Phe Asp			
35	40	45	
Pro Val Lys Arg Cys Cys Ala Gln Pro Cys Tyr Met Gly Cys Ile Pro			
50	55	60	
Cys Cys Phe			
65			
<210> 307			
<211> 15			
<212> PRT			
<213> Conus ebraceus			
<220>			
<221> PEPTIDE			
<222> (1)..(15)			
<223> Xaa at residue 5 and 12 is Pro or Hyp; Xaa at residue 7 is Tyr, 1 25I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Ty r			
<400> 307			
Cys Cys Ala Gln Xaa Cys Xaa Met Gly Cys Ile Xaa Cys Cys Phe			
1	5	10	15
<210> 308			
<211> 238			
<212> DNA			
<213> Conus flavidus			
<400> 308			
ggatccatga tgtctaaact gggagtcttg ttgaccatct gtctgcttct gtttcccctt 60			
actgctgttc cggtggatgg agatcaacct gcagaccaggc ctgcagagcg tatgcagaac 120			
gagcagcatc ccttgtttga tcagaaaaga aggtgctgcc ggtggccatg ccccatata 180			
tgcggcatgg ctaggtgttg ctcgtcatga taacgtgttg atgaccaact ttctcgag 238			
<210> 309			
<211> 67			
<212> PRT			
<213> Conus flavidus			
<400> 309			
Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe			
1	5	10	15
Pro Leu Thr Ala Val Pro Leu Asp Gly Asp Gln Pro Ala Asp Gln Pro			
20	25	30	
Ala Glu Arg Met Gln Asn Glu Gln His Pro Leu Phe Asp Gln Lys Arg			
35	40	45	
Arg Cys Cys Arg Trp Pro Cys Pro Ser Ile Cys Gly Met Ala Arg Cys			
50	55	60	
Cys Ser Ser			
65			

<210> 310
 <211> 19
 <212> PRT
 <213> Conus flavidus

<220>
 <221> PEPTIDE
 <222> (1)..(19)
 <223> Xaa at residue 6 and 8 is Pro or Hyp; Xaa at residue 5 is Trp or
 bromo-Trp

<400> 310
 Arg Cys Cys Arg Xaa Xaa Cys Xaa Ser Ile Cys Gly Met Ala Arg Cys
 1 5 10 15

Cys Ser Ser

<210> 311
 <211> 245
 <212> DNA
 <213> Conus miliaris

<220>
 <221> misc_feature
 <222> (1)..(245)
 <223> n may be any nucleotide

<400> 311
 ggatccatga tgtctaaact gggagtcctg ttgaccatct gtctgcttct gttccaatt 60
 actgcccttc cactggatga agatcaacct gcagaccgac ctgcagagcg tatgcaggac 120
 attgcaactg aacagcatcc cttgtttgat cccgtcaaac ggtgttgcga ttggccatgc 180
 agcgcaggat gctacccttg ttgcttcct taataacgtg ttgatgacca actnangnaa 240
 aaaaaa 245

<210> 312
 <211> 68
 <212> PRT
 <213> Conus miliaris

<400> 312
 Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
 1 5 10 15

Pro Ile Thr Ala Leu Pro Leu Asp Glu Asp Gln Pro Ala Asp Arg Pro
 20 25 30

Ala Glu Arg Met Gln Asp Ile Ala Thr Glu Gln His Pro Leu Phe Asp
 35 40 45

Pro Val Lys Arg Cys Cys Asp Trp Pro Cys Ser Ala Gly Cys Tyr Pro
 50 55 60

Cys Cys Phe Pro
 65

<210> 313
 <211> 16
 <212> PRT
 <213> Conus miliaris

<220>

<221> PEPTIDE
 <222> (1)..(16)
 <223> Xaa at residue 5, 12 and 16 is Pro or Hyp; Xaa at residue 4 is Trp or bromo-Trp; Xaa at residue 11 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr

<400> 313
 Cys Cys Asp Xaa Xaa Cys Ser Ala Gly Cys Xaa Xaa Cys Cys Cys Phe Xaa
 1 5 10 15

<210> 314
 <211> 230
 <212> DNA
 <213> Conus miliaris

<220>
 <221> misc_feature
 <222> (1)..(230)
 <223> n may be any nucleotide

<400> 314
 ggatccatga tgtctaaact gggagtggtg ccattcgctt ttctggcctt gtttcccctg 60
 gcaacactcc aactggatgc agatcaacct gcagaccgac ctgcgcgtaa aaagggcatt 120
 gcaactaaac ggcatccctt gtctgatcct gtcagagggt gttgccctcc aatgtgcaca 180
 ccatgcttcc cttgctgttt tcgttaataa cgtgttgatg natgatgnan 230

<210> 315
 <211> 66
 <212> PRT
 <213> Conus miliaris

<400> 315
 Met Met Ser Lys Leu Gly Val Val Pro Phe Val Phe Leu Val Leu Phe
 1 5 10 15

Pro Leu Ala Thr Leu Gln Leu Asp Ala Asp Gln Pro Ala Asp Arg Pro
 20 25 30

Ala Arg Lys Lys Gly Ile Ala Thr Lys Arg His Pro Leu Ser Asp Pro
 35 40 45

Val Arg Gly Cys Cys Pro Pro Met Cys Thr Pro Cys Phe Pro Cys Cys
 50 55 60

Phe Arg
 65

<210> 316
 <211> 16
 <212> PRT
 <213> Conus miliaris

<220>
 <221> PEPTIDE
 <222> (1)..(16)
 <223> Xaa at residue 4, 9 and 12 is Pro or Hyp; Xaa at residue 5 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr

<400> 316
 Gly Cys Cys Xaa Xaa Met Cys Thr Xaa Cys Phe Xaa Cys Cys Phe Arg
 1 5 10 15

<210> 317
 <211> 295
 <212> DNA
 <213> Conus ammiralis

<400> 317
 caagagggat cgatagcagt tcatgatgtc taaaactggga gtcttgttga ccatctgtct 60
 gcttctgttt ccccttaactg ctcttccgct ggatggagat caacctgcag accaagctgc 120
 agagcgtatg caggccgagc agcatccctt gtttgcgtcag aaaagacggt gttgcaggtt 180
 tccatgcccc gatacttgca gacatttgcg ttgcgggtga tgataacgtg ctgtatgaccc 240
 actttgtcat cacggctacg tcaagtgtct aatgaataag taaaatgatt gcagt 295

<210> 318
 <211> 65
 <212> PRT
 <213> Conus ammiralis

<400> 318
 Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
 1 5 10 15

Pro Leu Thr Ala Leu Pro Leu Asp Gly Asp Gln Pro Ala Asp Gln Ala
 20 25 30

Ala Glu Arg Met Gln Ala Glu Gln His Pro Leu Phe Asp Gln Lys Arg
 35 40 45

Arg Cys Cys Arg Phe Pro Cys Pro Asp Thr Cys Arg His Leu Cys Cys
 50 55 60

Gly
 65

<210> 319
 <211> 16
 <212> PRT
 <213> Conus ammiralis

<220>
 <221> PEPTIDE
 <222> (1)..(16)
 <223> Xaa at residue 6 and 8 is Pro or Hyp

<400> 319
 Arg Cys Cys Arg Phe Xaa Cys Xaa Asp Thr Cys Arg His Leu Cys Cys
 1 5 10 15

<210> 320
 <211> 267
 <212> DNA
 <213> Conus ammiralis

<400> 320
 caagagggat cgatagcagt tcatgatgtt taaaactggga gtcttgctga ccatctgtct 60
 actttctgttt tcccttaatg ctgttccgct ggatggagat caacctgcag accaaccgtgc 120
 agagcgtctg ctggacgaca tttcatctga aaataatccc ttttatgtac ccggccaaacg 180
 gtgttgcacatg acttgcttcg gttgcacacc ttgttgcgttga tgaccagcct catcaagtgt 240

ctaacgaata agtaaaacga ttgcagt 267

<210> 321
 <211> 66
 <212> PRT
 <213> Conus ammiralis

<400> 321
 Met Met Phe Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
 1 5 10 15

Ser Leu Asn Ala Val Pro Leu Asp Gly Asp Gln Pro Ala Asp Gln Pro
 20 25 30

Ala Glu Arg Leu Leu Asp Asp Ile Ser Ser Glu Asn Asn Pro Phe Tyr
 35 40 45

Asp Pro Ala Lys Arg Cys Cys Met Thr Cys Phe Gly Cys Thr Pro Cys
 50 55 60

Cys Gly
 65

<210> 322
 <211> 12
 <212> PRT
 <213> Conus ammiralis

<220>
 <221> PEPTIDE
 <222> (1)..(12)
 <223> Xaa at residue 10 is Pro or Hyp

<400> 322
 Cys Cys Met Thr Cys Phe Gly Cys Thr Xaa Cys Cys
 1 5 10

<210> 323
 <211> 294
 <212> DNA
 <213> Conus ammiralis

<400> 323
 caagaaggat cgatagcagt tcatgatgtc taaactggga gccttgttga ccatctgtct 60
 acttctgttt tcccttactg ctgttccgct ggatggagat caacatgcag accaacctgc 120
 agagcgtctg caggaccgc 5 ttccaaactga aatcatccc ttatatgatc ccgtcaaacg 180
 gtgttgcgat gattcggaat gcgactattc ttgctggcct tgctgtat 240
 tttgttatcg cggcctcatc ctatgtcaa atgaataagt aaaacgattg cagt 294

<210> 324
 <211> 71
 <212> PRT
 <213> Conus ammiralis

<400> 324
 Met Met Ser Lys Leu Gly Ala Leu Leu Thr Ile Cys Leu Leu Leu Phe
 1 5 10 15

Ser Leu Thr Ala Val Pro Leu Asp Gly Asp Gln His Ala Asp Gln Pro
 20 25 30

Ala Glu Arg Leu Gln Asp Arg Leu Pro Thr Glu Asn His Pro Leu Tyr
 35 40 45

Asp Pro Val Lys Arg Cys Cys Asp Asp Ser Glu Cys Asp Tyr Ser Cys
 50 55 60

Trp Pro Cys Cys Ile Phe Ser
 65 70

<210> 325
 <211> 18
 <212> PRT
 <213> Conus ammiralis

<220>
 <221> PEPTIDE
 <222> (1)..(18)
 <223> Xaa at residue 6 is Glu or gamma-carboxy Glu; Xaa at residue 13 is Pro or Hyp; Xaa at residue 12 is Trp or bromo-Trp; Xaa at residue 9 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr

<400> 325
 Cys Cys Asp Asp Ser Xaa Cys Asp Xaa Ser Cys Xaa Xaa Cys Cys Ile
 1 5 10 15

Phe Ser

<210> 326
 <211> 284
 <212> DNA
 <213> Conus ammiralis

<400> 326
 caagaggat cgatacgagt tcatgatgtt taaactcgga gtcttgctga ccatctgtct 60
 acttctgttt tccctaattt ctgttccgct ggatggagat caacatgcag accaacacctc 120
 agagcgtctg caggaccgccc ttccaaactga aatcatccc ttatatgatc ccgtcaaaacg 180
 gtgttgcagg ttgttatgcc tcagttgcaa cccttgggttggatgaccag ctttggatc 240
 acggcctcat caagtgtcta atgaataagt aaaacgattt cagt 284

<210> 327
 <211> 67
 <212> PRT
 <213> Conus ammiralis

<400> 327
 Met Met Phe Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
 1 5 10 15

Ser Leu Ile Ala Val Pro Leu Asp Gly Asp Gln His Ala Asp Gln Pro
 20 25 30

Ala Glu Arg Leu Gln Asp Arg Leu Pro Thr Glu Asn His Pro Leu Tyr
 35 40 45

Asp Pro Val Lys Arg Cys Cys Arg Leu Leu Cys Leu Ser Cys Asn Pro
 50 55 60

Cys Cys, Gly
 65

```

<210> 328
<211> 13
<212> PRT
<213> Conus ammiralis

<220>
<221> PEPTIDE
<222> (1)..(13)
<223> Xaa at residue 11 is Pro or Hyp

<400> 328
Cys Cys Arg Leu Leu Cys Leu Ser Cys Asn Xaa Cys Cys
1 5 10

<210> 329
<211> 289
<212> DNA
<213> Conus ammiralis

<400> 329
caagaaggat cgatacgagt tcatgatgtc taaaactggga gccttggta ccatctgtct 60
acttctgttt tcccttactg ctgttccgct ggatggagat caacatgcag accaacacctc 120
agagcgtctg caggaccgca ttccaactga agatcatccc ttatttgatc ccaacaaacg 180
gtgttgcgt gattcggaaat gcggctattc atgctggcct tgctgttatg gataagcttt 240
gttatcgccg cctcatccag tgtcaacgaa taagtaaaac gattgcagt 289

<210> 330
<211> 70
<212> PRT
<213> Conus ammiralis

<400> 330
Met Met Ser Lys Leu Gly Ala Leu Leu Thr Ile Cys Leu Leu Leu Phe
1 5 10 15

Ser Leu Thr Ala Val Pro Leu Asp Gly Asp Gln His Ala Asp Gln Pro
20 25 30

Ala Glu Arg Leu Gln Asp Arg Ile Pro Thr Glu Asp His Pro Leu Phe
35 40 45

Asp Pro Asn Lys Arg Cys Cys Asp Asp Ser Glu Cys Gly Tyr Ser Cys
50 55 60

Trp Pro Cys Cys Tyr Gly
65 70

<210> 331
<211> 16
<212> PRT
<213> Conus ammiralis

<220>
<221> PEPTIDE
<222> (1)..(16)
<223> Xaa at residue 6 is Glu or gamma-carboxy Glu; Xaa at residue 13 is
      Pro or Hyp; Xaa at residue 12 is Trp or bromo-Trp; Xaa at residue 9 and 16 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr

```

<400> 331
 Cys Cys Asp Asp Ser Xaa Cys Gly Xaa Ser Cys Xaa Xaa Cys Cys Xaa
 1 5 10 15

<210> 332
 <211> 272
 <212> DNA
 <213> Conus spurius

<400> 332
 caagaaggat cgatacgagt tcatgatgtc taaaactggga gtcttgctga ccatctgtct 60
 gcttctgttt ccacgtactt ctcttccgct ggatggagat caacctgcag tccgatctgc 120
 aaagcgtatg cattcatcta tacagcgtcg tttcttgat cccgtcaaac ggtgttgc 180
 tagatgcagc gagtgcaacc cttgttggtgg atgaccagct ttgtcatcgc ggcctcatta 240
 agtgtctaattt gaataaagtaa aatgatttgc gt 272

<210> 333
 <211> 63
 <212> PRT
 <213> Conus spurius

<400> 333
 Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
 1 5 10 15

Pro Arg Thr Ser Leu Pro Leu Asp Gly Asp Gln Pro Ala Val Arg Ser
 20 25 30

Ala Lys Arg Met His Ser Ser Ile Gln Arg Arg Phe Phe Asp Pro Val
 35 40 45

Lys Arg Cys Cys Pro Arg Cys Ser Glu Cys Asn Pro Cys Cys Gly
 50 55 60

<210> 334
 <211> 12
 <212> PRT
 <213> Conus spurius

<220>
 <221> PEPTIDE
 <222> (1)..(12)
 <223> Xaa at residue 7 is Glu or gamma-carboxy Glu; Xaa at residue 3 and 10 is Pro or Hyp

<400> 334
 Cys Cys Xaa Arg Cys Ser Xaa Cys Asn Xaa Cys Cys
 1 5 10

<210> 335
 <211> 293
 <212> DNA
 <213> Conus omaria

<400> 335
 caagagggat cgatacgagt tcatgatgtc taaaactggga gtctcggtga ccatctgtct 60
 acttctatattt tcccttactg ctgttccgct tgatggagat caacatgcag accaacctgc 120
 agagcgtctg cagggcgaca ttttatctga aaagcatccc ttatttaatc ccgtcaaacg 180

gtgttgcgat gaggaagaat gcagcagtgc atgctggcct ttttgggg ggtgatcagc 240
 tttgttatcg cggcctcatc aagtgtctaa tgaataagta aaatgattgc agt 293
 <210> 336
 <211> 70
 <212> PRT
 <213> Conus omaria

<400> 336
 Met Met Ser Lys Leu Gly Val Ser Leu Thr Ile Cys Leu Leu Leu Phe
 1 5 10 15
 Ser Leu Thr Ala Val Pro Leu Asp Gly Asp Gln His Ala Asp Gln Pro
 20 25 30
 Ala Glu Arg Leu Gln Gly Asp Ile Leu Ser Glu Lys His Pro Leu Phe
 35 40 45
 Asn Pro Val Lys Arg Cys Cys Asp Glu Glu Glu Cys Ser Ser Ala Cys
 50 55 60
 Trp Pro Cys Cys Trp Gly
 65 70

<210> 337
 <211> 16
 <212> PRT
 <213> Conus omaria

<220>
 <221> PEPTIDE
 <222> (1)..(16)
 <223> Xaa at residue 4, 5 and 6 is Glu or gamma-carboxy Glu; Xaa at residue 13 is Pro or Hyp; Xaa at residue 12 and 16 is Trp or bromo-Trp

<400> 337
 Cys Cys Asp Xaa Xaa Xaa Cys Ser Ser Ala Cys Xaa Xaa Cys Cys Xaa
 1 5 10 15

<210> 338
 <211> 293
 <212> DNA
 <213> Conus omaria

<400> 338
 caagaaggat cgatagcagt tcatgatgtc taaactggga gtcttggta tcatctgtct 60
 acttctgtgt ccccttactg ctgttctgga ggatggagat caacctgcag accgacctgc 120
 agagcgtatg caggacgaca tttcaactga gcatcatccc ttttatgatc ccgtcaaacg 180
 gtgttgcagg tacgggtgga catgcttgct agatgcact ctttgatt gttgaccagt 240
 tttgttatcg cggcctcgtc aagtgtctaa tgaataagta aaacgattgc agt 293

<210> 339
 <211> 70
 <212> PRT
 <213> Conus omaria

<400> 339
 Met Met Ser Lys Leu Gly Val Leu Leu Ile Ile Cys Leu Leu Cys
 1 5 10 15

Pro Leu Thr Ala Val Leu Glu Asp Gly Asp Gln Pro Ala Asp Arg Pro
 20 25 30

Ala Glu Arg Met Gln Asp Asp Ile Ser Thr Glu His His Pro Phe Tyr
 35 40 45

Asp Pro Val Lys Arg Cys Cys Lys Tyr Gly Trp Thr Cys Leu Leu Gly
 50 55 60

Cys Thr Pro Cys Asp Cys
 65 70

<210> 340
 <211> 17
 <212> PRT
 <213> Conus omaria

<220>
 <221> PEPTIDE
 <222> (1)..(17)
 <223> Xaa at residue is 14 Pro or Hyp; Xaa at residue 6 is Trp or bromo-Trp; Xaa at residue 4 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr

<400> 340
 Cys Cys Lys Xaa Gly Xaa Thr Cys Leu Leu Gly Cys Thr Xaa Cys Asp
 1 5 10 15

Cys

<210> 341
 <211> 290
 <212> DNA
 <213> Conus omaria

<400> 341
 caagaggat cgatagcagt tcatgatgtc tatactggga gtcttggta tcatctgtct 60
 acttctgtgt ccccttactg ctgttctgga ggatggagat caacctgcag accgacctgc
 agagcgtatg caggacggca tttcatctga acatcatccc ttttggatc ccgtcaaacg 120
 gtgttggccat ctattggcat gccgcttgg atgctcgct ttttggatc ccgtcaaacg 180
 gttatcgcgg cctcatcaag tgtctaatga ataagtaaaa cgattgcagt 240
 290

<210> 342
 <211> 69
 <212> PRT
 <213> Conus omaria

<400> 342
 Met Met Ser Ile Leu Gly Val Leu Leu Ile Ile Cys Leu Leu Cys
 1 5 10 15

Pro Leu Thr Ala Val Leu Glu Asp Gly Asp Gln Pro Ala Asp Arg Pro
 20 25 30

Ala Glu Arg Met Gln Asp Gly Ile Ser Ser Glu His His Pro Phe Leu
 35 40 45

Asp Pro Val Lys Arg Cys Cys His Leu Leu Ala Cys Arg Phe Gly Cys
 50 55 60

Ser Pro Cys Cys Trp
65

<210> 343

<211> 16

<212> PRT

<213> Conus omaria

<220>

<221> PEPTIDE

<222> (1)..(16)

<223> Xaa at residue 13 is Pro or Hyp; Xaa at residue 16 is Trp or bromo-Trp

<400> 343

Cys Cys His Leu Leu Ala Cys Arg Phe Gly Cys Ser Xaa Cys Cys Xaa
1 5 10 15

<210> 344

<211> 293

<212> DNA

<213> Conus omaria

<400> 344

caagaaggat cgatacgagt tcatgatgtc taaaactggga gtcttggta tcatctgtct 60
acttctttgt ccccttactg ctgttccgca ggatggagat caacctgcag accgacacctgc 120
agagcgtatg cagggcggca tttcatctga acatcatccc tttttgatc ccgtcaaacg 180
gtgttgcagg tacgggtgga catgctggct aggatgcact ccctgtggtt gttgaccagc 240
tttggatcg cggcctcatc aagtgtctaa tgaataagta aaacgattgc agt 293

<210> 345

<211> 70

<212> PRT

<213> Conus omaria

<400> 345

Met Met Ser Lys Leu Gly Val Leu Leu Ile Ile Cys Leu Leu Leu Cys
1 5 10 15

Pro Leu Thr Ala Val Pro Gln Asp Gly Asp Gln Pro Ala Asp Arg Pro
20 25 30

Ala Glu Arg Met Gln Gly Gly Ile Ser Ser Glu His His Pro Phe Phe
35 40 45

Asp Pro Val Lys Arg Cys Cys Arg Tyr Gly Trp Thr Cys Trp Leu Gly
50 55 60

Cys Thr Pro Cys Gly Cys
65 70

<210> 346

<211> 17

<212> PRT

<213> Conus omaria

<220>

<221> PEPTIDE

<222> (1)..(17)

<223> Xaa at residue 14 is Pro or Hyp; Xaa at residue 6 and 9 is Trp or bromo-Trp; Xaa at residue 4 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-

iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr

<400> 346

Cys Cys Arg Xaa Gly Xaa Thr Cys Xaa Leu Gly Cys Thr Xaa Cys Gly
1 5 10 15

Cys

<210> 347

<211> 293

<212> DNA

<213> Conus episcopatus

<400> 347

caagaaggat cgatacgagt tcatgatgtc taaactggga gtcttgtga ccatctgtct 60
acttctgtt tcccttatttgc tgcgtccgct tgcgtccgct tgcgtccgct tgcgtccgct
agagcgtctg cagggcgaca ttttatctga aaagcatccc ttatttatgc ctgtcaaacg 120
gtgttgcgtt gaggacgaat gcaacagtgc atgctggcct tgcgtccgct tgcgtccgct
tttgcgttgcgtt cggcctgatc aagtgtataa tgaataagta aaacgattgc agt 180
240
293

<210> 348

<211> 70

<212> PRT

<213> Conus episcopatus

<400> 348

Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
1 5 10 15

Ser Leu Ile Ala Val Pro Leu Asp Gly Asp Gln His Ala Asp Gln Pro
20 25 30

Ala Glu Arg Leu Gln Gly Asp Ile Leu Ser Glu Lys His Pro Leu Phe
35 40 45

Met Pro Val Lys Arg Cys Cys Asp Glu Asp Glu Cys Asn Ser Ser Cys
50 55 60

Trp Pro Cys Cys Trp Gly
65 70

<210> 349

<211> 16

<212> PRT

<213> Conus episcopatus

<220>

<221> PEPTIDE

<222> (1)..(16)

<223> Xaa at residue 4 and 6 is Glu or gamma-carboxy Glu; Xaa at residue 13 is Pro or Hyp; Xaa at residue 12 and 16 is Trp or bromo-Trp

<400> 349

Cys Cys Asp Xaa Asp Xaa Cys Asn Ser Ser Cys Xaa Xaa Cys Cys Xaa
1 5 10 15

<210> 350

<211> 293

<212> DNA

<213> Conus episcopatus

<400> 350

caagaggat	cgatacgagt	tcatgatgtc	taaactggga	gtcttggta	ccatctgtct	60
acttctgttt	tcccttattt	ctgttccgct	tgatggagat	caacatgcag	accaacctgc	120
agagcgtctg	cagggcgaca	ttttatctga	aaagcatccc	ttatttatgc	ctgtcaaacg	180
gtgttgcgt	gaggacgaat	gcagcagttc	atgctggcct	tgttgggg	gatgagcagc	240
tttggatatcg	cggcctcatc	aagtgtctaa	tgaataagta	aaacgattgc	agt	293

<210> 351

<211> 70

<212> PRT

<213> Conus episcopatus

<400> 351

Met	Met	Ser	Lys	Leu	Gly	Val	Leu	Leu	Thr	Ile	Cys	Leu	Leu	Leu	Phe
1				5				10						15	

Ser	Leu	Ile	Ala	Val	Pro	Leu	Asp	Gly	Asp	Gln	His	Ala	Asp	Gln	Pro
				20				25					30		

Ala	Glu	Arg	Leu	Gln	Gly	Asp	Ile	Leu	Ser	Glu	Lys	His	Pro	Leu	Phe
	35				40				45						

Met	Pro	Val	Lys	Arg	Cys	Cys	Asp	Glu	Asp	Glu	Cys	Ser	Ser	Ser	Cys
	50				55				60						

Trp	Pro	Cys	Cys	Trp	Gly
65				70	

<210> 352

<211> 16

<212> PRT

<213> Conus episcopatus

<220>

<221> PEPTIDE

<222> (1)..(16)

<223> Xaa at residue4 and 6 is Glu or gamma-carboxy Glu; Xaa at residue 13 is Pro or Hyp; Xaa at residue 12 and 16 is Trp or bromo-Trp

<400> 352

Cys	Cys	Asp	Xaa	Asp	Xaa	Cys	Ser	Ser	Cys	Xaa	Xaa	Cys	Cys	Xaa
1				5				10				15		

<210> 353

<211> 290

<212> DNA

<213> Conus episcopatus

<400> 353

caagaggat	cgatacgagt	tcatgatgtc	taaactggga	gtcttggta	ccatctgtct	60
acttctgttt	tcccttactg	ctgttccgct	tgatggagat	caacatgcag	accaacctgc	120
agagcgtctg	cagggcgaca	ttttatctga	aaagcatccc	ttatttaatc	ccgtcaaacg	180
gtgttgcggc	gcggcgccat	gtgccatggg	atgcaagcct	tgttggat	gagcagctt	240
gttatcggtt	cctcatcaag	tgtctaata	ataagtaaaa	cgattgcagt		290

<210> 354

<211> 69

<212> PRT

<213> Conus episcopatus

<400> 354

Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
1 5 10 15Ser Leu Thr Ala Val Pro Leu Asp Gly Asp Gln His Ala Asp Gln Pro
20 25 30Ala Glu Arg Leu Gln Gly Asp Ile Leu Ser Glu Lys His Pro Leu Phe
35 40 45Asn Pro Val Lys Arg Cys Cys Pro Ala Ala Ala Cys Ala Met Gly Cys
50 55 60Lys Pro Cys Cys Gly
65

<210> 355

<211> 15

<212> PRT

<213> Conus episcopatus

<220>

<221> PEPTIDE

<222> (1)..(15)

<223> Xaa at residue 3 and 13 is Pro or Hyp

<400> 355

Cys Cys Xaa Ala Ala Ala Cys Ala Met Gly Cys Lys Xaa Cys Cys
1 5 10 15

<210> 356

<211> 295

<212> DNA

<213> Conus aulicus

<400> 356

caagagggat cgatacgagt tcatgatgtc taaaactggga gtcttggta ccatctgtct 60

gcttcgttt tccgttactg ctcttccgcc ggtatggagat caacctgcag accgagctgc 120

agagcgtagg caggtcgagc agcatcccgt gtttgcat gaaagagggt gttgctcgcc 180

accatgccac agtatttgcg ctgctttctg ttgcgggtga tgataacgtg ttgatgaccc 240

actttgtcat cacggctgcg tcaagtgtct aatgaataag taaaatgatt gcagt 295

<210> 357

<211> 65

<212> PRT

<213> Conus aulicus

<400> 357

Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
1 5 10 15Ser Val Thr Ala Leu Pro Pro Asp Gly Asp Gln Pro Ala Asp Arg Ala
20 25 30

Ala Glu Arg Arg Gln Val Glu Gln His Pro Val Phe Asp His Glu Arg

35

40

45

Gly Cys Cys Ser Pro Pro Cys His Ser Ile Cys Ala Ala Phe Cys Cys
 50 55 60

Gly
 65

<210> 358
 <211> 16
 <212> PRT
 <213> Conus aulicus

<220>
 <221> PEPTIDE
 <222> (1)..(16)
 <223> Xaa at residue 5 and 6 is Pro or Hyp

<400> 358
 Gly Cys Cys Ser Xaa Xaa Cys His Ser Ile Cys Ala Ala Phe Cys Cys
 1 5 10 15

<210> 359
 <211> 290
 <212> DNA
 <213> Conus aulicus

<400> 359
 caagaggat cgatagcagt tcatgatgtc taaactggga gtcttgtga ccatctgtct 60
 acttctgttt tcccttactg ctgttccgct tcatggagat caacatgcag accaacacctc
 agagcgtctg cagggcgaca ttttatctga aaagcatccc ttatttaatc ccgtcaaacg 120
 gtgttgcgca ccgggtggcat gtgccatggg atgcaagcct tggatggat gagcagctt 180
 gttatcgtgg cctcatcaag tgtctaatga ataagtaaaa tgattgcagt 240
 290

<210> 360
 <211> 69
 <212> PRT
 <213> Conus aulicus

<400> 360
 Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
 1 5 10 15

Ser Leu Thr Ala Val Pro Leu Asp Gly Asp Gln His Ala Asp Gln Pro
 20 25 30

Ala Glu Arg Leu Gln Gly Asp Ile Leu Ser Glu Lys His Pro Leu Phe
 35 40 45

Asn Pro Val Lys Arg Cys Cys Arg Pro Val Ala Cys Ala Met Gly Cys
 50 55 60

Lys Pro Cys Cys Gly
 65

<210> 361
 <211> 15
 <212> PRT
 <213> Conus aulicus

<220>

<221> PEPTIDE
 <222> (1)..(15)
 <223> Xaa at residue 4 and 13 is Pro or Hyp

<400> 361
 Cys Cys Arg Xaa Val Ala Cys Ala Met Gly Cys Lys Xaa Cys Cys Cys
 1 5 10 15

<210> 362
 <211> 290
 <212> DNA
 <213> Conus aulicus

<400> 362
 caagagggat cgatagcagt tcatgatgtc taaactggga gtcttggta tcatctgtct 60
 acttctgtct ccccttactg ctgttccgct ggatggagat caacctgcag accgacctgc 120
 agagcgtatg caggacgaca tttcatctga acatcaaccc atgtttgatg ccatcagaca 180
 gtgttgcggc gcgggtggcat gcgccatggg atgcgagcct tgggtggat gaccagctt 240
 gttatcgccg cctcatcaag tgtctaata 15 290

<210> 363
 <211> 69
 <212> PRT
 <213> Conus aulicus

<400> 363
 Met Met Ser Lys Leu Gly Val Leu Leu Ile Ile Cys Leu Leu Leu Ser
 1 5 10 15

Pro Leu Thr Ala Val Pro Leu Asp Gly Asp Gln Pro Ala Asp Arg Pro
 20 25 30

Ala Glu Arg Met Gln Asp Asp Ile Ser Ser Glu His Gln Pro Met Phe
 35 40 45

Asp Ala Ile Arg Gln Cys Cys Pro Ala Val Ala Cys Ala Met Gly Cys
 50 55 60

Glu Pro Cys Cys Gly
 65

<210> 364
 <211> 16
 <212> PRT
 <213> Conus aulicus

<220>
 <221> PEPTIDE
 <222> (1)..(16)
 <223> Xaa at residue 1 is Gln or pyro-Glu; Xaa at residue 13 is Glu or
 gamma-carboxy Glu; Xaa at residue 4 and 14 is Pro or Hyp

<400> 364
 Xaa Cys Cys Xaa Ala Val Ala Cys Ala Met Gly Cys Xaa Xaa Cys Cys
 1 5 10 15

<210> 365
 <211> 293
 <212> DNA
 <213> Conus aureus

<400> 365
 caagaaggat cgatacgagt tcatgatgtc taaactggga gccttgttga ccatctgtct 60
 acttctgttt tcccttactg ctgttccgct ggatggagat caacatgcag accaacatgc 120
 agagcgtctg catgaccgc ttccaaactga aaatcatccc ttatatgatc ccgtcaaacg 180
 gtgttgcgat gattcggaat gcgactattc ttgctggcct tgctgtatcc ttggataacc 240
 tttgttatcg cggcctcatc aagtgtcaaa tgaataagta aaacgattgc agt 293

<210> 366
 <211> 71
 <212> PRT
 <213> Conus aureus

<400> 366
 Met Met Ser Lys Leu Gly Ala Leu Leu Thr Ile Cys Leu Leu Leu Phe
 1 5 10 15

Ser Leu Thr Ala Val Pro Leu Asp Gly Asp Gln His Ala Asp Gln His
 20 25 30

Ala Glu Arg Leu His Asp Arg Leu Pro Thr Glu Asn His Pro Leu Tyr
 35 40 45

Asp Pro Val Lys Arg Cys Cys Asp Asp Ser Glu Cys Asp Tyr Ser Cys
 50 55 60

Trp Pro Cys Cys Ile Phe Gly
 65 70

<210> 367
 <211> 17
 <212> PRT
 <213> Conus aureus

<220>
 <221> PEPTIDE
 <222> (1)..(17)
 <223> Xaa at residue 6 is Glu or gamma-carboxy Glu; Xaa at residue 13 is Pro or Hyp; Xaa at residue 12 is Trp or bromo-Trp; Xaa at residue 9 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr

<400> 367
 Cys Cys Asp Asp Ser Xaa Cys Asp Xaa Ser Cys Xaa Xaa Cys Cys Ile
 1 5 10 15

Phe

<210> 368
 <211> 290
 <212> DNA
 <213> Conus aureus

<400> 368
 caagagggat cgatacgagt tcatgatgtc taaactggga gccttgttga ccatctgtct 60
 acttctgttt tcccttactg ctgttccgct ggatggagat caacatgcag accaacatgc 120
 agagcgtctg caggaccgc ttccaaactga aaatcatccc ttatttgcatc cgaacaaacg 180
 gtgttgcaat gattggaaat gcgacgattc atgctggcct tgctgtatc gataaccttt 240

gttatcgccg cctcatcaag tgtcaaatga ataagtaaaa cgattgcagt 290
 <210> 369
 <211> 70
 <212> PRT
 <213> Conus aureus

<400> 369
 Met Met Ser Lys Leu Gly Ala Leu Leu Thr Ile Cys Leu Leu Leu Phe
 1 5 10 15

Ser Leu Thr Ala Val Pro Leu Asp Gly Asp Gln His Ala Asp Gln Pro
 20 25 30

Ala Glu Arg Leu Gln Asp Arg Ile Pro Thr Glu Asn His Pro Leu Phe
 35 40 45

Asp Pro Asn Lys Arg Cys Cys Asn Asp Trp Glu Cys Asp Asp Ser Cys
 50 55 60

Trp Pro Cys Cys Tyr Gly
 65 70

<210> 370
 <211> 16
 <212> PRT
 <213> Conus aureus

<220>
 <221> PEPTIDE
 <222> (1)..(16)
 <223> Xaa at residue 6 is Glu or gamma-carboxy Glu; Xaa at residue 13 is Pro or Hyp; Xaa at residue 5 and 12 is Trp or bromo-Trp; Xaa at residue 16 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr

<400> 370
 Cys Cys Asn Asp Xaa Xaa Cys Asp Asp Ser Cys Xaa Xaa Cys Cys Xaa
 1 5 10 15

<210> 371
 <211> 310
 <212> DNA
 <213> Conus consors

<400> 371
 caagaggat cgatagcagt tcatgatgtc taaactggga gtcttggta ccatctgttt 60
 gcttctgtt ccccttactg ctcttccat ggatggagat caatctgttag accgacctgc 120
 agagcgtatg caggacgaca tttcatctga gctgcattccc ttgttcaatc agaaaagaat 180
 gtgttgcggc gaaggtgcgc catgccccag ctatccaga aacagtcaga tttgtcattg 240
 ttgtttaatg acaacgtgtc gatgaccaac ttctgttatca cgactaatga ataagtaaaa 300
 tgattgcagt 310

<210> 372
 <211> 74
 <212> PRT
 <213> Conus consors

<400> 372
 Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe

1	5	10	15
---	---	----	----

Pro Leu Thr Ala Leu Pro Met Asp Gly Asp Gln Ser Val Asp Arg Pro
 20 25 30

Ala Glu Arg Met Gln Asp Asp Ile Ser Ser Glu Leu His Pro Leu Phe
 35 40 45

Asn Gln Lys Arg Met Cys Cys Gly Glu Gly Ala Pro Cys Pro Ser Tyr
 50 55 60

Phe Arg Asn Ser Gln Ile Cys His Cys Cys
 65 70

<210> 373
<211> 22
<212> PRT
<213> Conus consors

<220>
<221> PEPTIDE
<222> (1)..(22)
<223> Xaa at residue 5 is Glu or gamma-carboxy Glu; Xaa at residue 8 and 10 is Pro or Hyp; Xaa at residue 12 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr

<400> 373
Met Cys Cys Gly Xaa Gly Ala Xaa Cys Xaa Ser Xaa Phe Arg Asn Ser
 1 5 10 15

Gln Ile Cys His Cys Cys
 20

<210> 374
<211> 315
<212> DNA
<213> Conus consors

<400> 374
taagagggat cgatagcagt tcatgatgtc taaaactggga gtcttggta ccatctgtct 60
gcttctgtt ccccttattt ctcttccaat ggatggagat caacctgcag accgacctgc 120
agagcgtatg caggacgaca tttcatctca gcagcatccc ttgtttgata agagaggccg 180
ctgttgcgat gtgccgaacg catgctccgg cagatggtgc agagatcacg cacaatgtg 240
cggatgacga taacgtgttg atgaccaact ttgtgatcac ggctacatca agtgaataag 300
taaaaacgatt gcagt 315

<210> 375
<211> 74
<212> PRT
<213> Conus consors

<400> 375
Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
 1 5 10 15

Pro Leu Ile Ala Leu Pro Met Asp Gly Asp Gln Pro Ala Asp Arg Pro
 20 25 30

Ala Glu Arg Met Gln Asp Asp Ile Ser Ser Gln Gln His Pro Leu Phe
 35 40 45

Asp Lys Arg Gly Arg Cys Cys Asp Val Pro Asn Ala Cys Ser Gly Arg
 50 55 60

Trp Cys Arg Asp His Ala Gln Cys Cys Gly
 65 70

<210> 376
 <211> 22
 <212> PRT
 <213> Conus consors

<220>
 <221> PEPTIDE
 <222> (1)..(22)
 <223> Xaa at residue 7 is Pro or Hyp; Xaa at residue 14 is Trp or bromo-Trp

<400> 376
 Gly Arg Cys Cys Asp Val Xaa Asn Ala Cys Ser Gly Arg Xaa Cys Arg
 1 5 10 15

Asp His Ala Gln Cys Cys
 20

<210> 377
 <211> 322
 <212> DNA
 <213> Conus consors

<400> 377
 caagagggat cgatagcagt tcatgatgtc taaactggga gtcttggta ctgtctgttt 60
 gttctgttt ccccttactg ctcttccat ggatggagat caacctgcag accaacctgc 120
 agagcgtatg caggacgaca tttcatctga gcagcatccc ttgtttgata agagacaaag 180
 gtgttgcact gggagaagg ggtcatgctc cggtaaagca tgcaaaagtc tcaaatttg 240
 ctctggacga taacgtgttg atgaccaact ttgttacac ggctacgtca agtgtctagt 300
 gaataagtaa aacgattgca gt 322

<210> 378
 <211> 76
 <212> PRT
 <213> Conus consors

<400> 378
 Met Met Ser Lys Leu Gly Val Leu Leu Thr Val Cys Leu Leu Leu Phe
 1 5 10 15

Pro Leu Thr Ala Leu Pro Met Asp Gly Asp Gln Pro Ala Asp Gln Pro
 20 25 30

Ala Glu Arg Met Gln Asp Asp Ile Ser Ser Glu Gln His Pro Leu Phe
 35 40 45

Asp Lys Arg Gln Arg Cys Cys Thr Gly Lys Lys Gly Ser Cys Ser Gly
 50 55 60

Lys Ala Cys Lys Ser Leu Lys Cys Cys Ser Gly Arg
 65 70 75

<210> 379

<211> 23
 <212> PRT
 <213> Conus consors

<220>
 <221> PEPTIDE
 <222> (1)..(23)
 <223> Xaa at residue 1 is Gln or pyro-Glu

<400> 379
 Xaa Arg Cys Cys Thr Gly Lys Lys Gly Ser Cys Ser Gly Lys Ala Cys
 1 5 10 15

Lys Ser Leu Lys Cys Cys Ser
 20

<210> 380
 <211> 284
 <212> DNA
 <213> Conus emaciatus

<400> 380
 caagagggat cgatagcagt tcatgatgtc taaactggga gtcttgctga ccatctgtct 60
 gcttcgttt ccccttactg ttcttccgat ggatggagat caacctgcag acctacctgc 120
 attgcgtgcg cagttcttg cacctgaaca tagtccccgg tttgaccccg tcaaacggtg 180
 ctgctcgccg gattgcagtg tttgcatccc ttgttgcccg tatggatcac cttgattatt 240
 gcggccacgt caagtgtcta atgaataagt aaaatgattg cagt 284

<210> 381
 <211> 70
 <212> PRT
 <213> Conus emaciatus

<400> 381
 Met Met Ser Lys Leu Gly Val Leu Leu Thr Ile Cys Leu Leu Leu Phe
 1 5 10 15

Pro 'Leu Thr Val Leu Pro Met Asp Gly Asp Gln Pro Ala Asp Leu Pro
 20 25 30

Ala Leu Arg Ala Gln Phe Phe Ala Pro Glu His Ser Pro Arg Phe Asp
 35 40 45

Pro Val Lys Arg Cys Cys Ser Arg Asp Cys Ser Val Cys Ile Pro Cys
 50 55 60

Cys Pro Tyr Gly Ser Pro
 65 70

<210> 382
 <211> 18
 <212> PRT
 <213> Conus emaciatus

<220>
 <221> PEPTIDE
 <222> (1)..(18)
 <223> Xaa at residue 11, 14 and 18 is Pro or Hyp; Xaa at residue 15 is
 Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phos
 pho-Tyr

<400> 382
 Cys Cys Ser Arg Asp Cys Ser Val Cys Ile Xaa Cys Cys Xaa Xaa Gly
 1 5 10 15

Ser Xaa

<210> 383
 <211> 13
 <212> PRT
 <213> Conus aurisiacus

<400> 383
 Cys Cys Lys Val Gln Cys Glu Ser Cys Thr Pro Cys Cys
 1 5 10

<210> 384
 <211> 15
 <212> PRT
 <213> Conus atlanticus

<400> 384
 Cys Cys Glu Leu Pro Cys Gly Pro Gly Phe Cys Val Pro Cys Cys
 1 5 10 15

<210> 385
 <211> 14
 <212> PRT
 <213> Conus arentus

<400> 385
 Cys Cys Glu Arg Pro Cys Asn Ile Gly Cys Val Pro Cys Cys
 1 5 10

<210> 386
 <211> 16
 <212> PRT
 <213> Conus bandus

<400> 386
 Cys Cys Asn Trp Pro Cys Ser Met Gly Cys Ile Pro Cys Cys Tyr Tyr
 1 5 10 15

<210> 387
 <211> 15
 <212> PRT
 <213> Conus betulinus

<400> 387
 Cys Cys Glu Leu Pro Cys His Gly Cys Val Pro Cys Cys Trp Pro
 1 5 10 15

<210> 388
 <211> 16
 <212> PRT
 <213> Conus betulinus

<400> 388
 Cys Cys Gly Leu Pro Cys Asn Gly Cys Val Pro Cys Cys Trp Pro Ser
 1 5 10 15

<210> 389
 <211> 18
 <212> PRT
 <213> Conus betulinus

<400> 389
 Cys Cys Ser Arg Asn Cys Ala Val Cys Ile Pro Cys Cys Pro Asn Trp
 1 5 10 15

Pro Ala

<210> 390
 <211> 14
 <212> PRT
 <213> Conus betulinus

<400> 390
 Cys Cys Lys Gln Ser Cys Thr Thr Cys Met Pro Cys Cys Trp
 1 5 10

<210> 391
 <211> 14
 <212> PRT
 <213> Conus betulinus

<220>
 <221> PEPTIDE
 <222> (1)..(14)
 <223> Xaa is Glu or gamma-carboxy Glu

<400> 391
 Ala Cys Cys Xaa Gln Ser Cys Thr Thr Cys Met Pro Cys Cys
 1 5 10

<210> 392
 <211> 14
 <212> PRT
 <213> Conus betulinus

<400> 392
 Cys Cys Glu Gln Ser Cys Thr Thr Cys Met Pro Cys Cys Trp
 1 5 10

<210> 393
 <211> 18
 <212> PRT
 <213> Conus characteristicus

<400> 393
 Arg Cys Cys Arg Tyr Pro Cys Pro Asp Ser Cys His Gly Ser Cys Cys
 1 5 10 15

Tyr Lys

<210> 394
 <211> 15
 <212> PRT
 <213> Conus characteristicus

<400> 394
 Cys Cys Pro Pro Val Ala Cys Asn Met Gly Cys Lys Pro Cys Cys
 1 5 10 15

<210> 395
 <211> 17
 <212> PRT
 <213> Conus characteristicus

<400> 395

Cys Cys Asp Asp Ser Glu Cys Asp Tyr Ser Cys Trp Pro Cys Cys Met
 1 5 10 15

Phe

<210> 396
 <211> 14
 <212> PRT
 <213> *Conus characteristicus*

<400> 396
 Cys Cys Arg Arg Cys Tyr Met Gly Cys Ile Pro Cys Cys Phe
 1 5 10

<210> 397
 <211> 16
 <212> PRT
 <213> *Conus textile*

<400> 397
 Cys Cys Pro Pro Val Ala Cys Asn Met Gly Cys Lys Pro Cys Cys Gly
 1 5 10 15

<210> 398
 <211> 19
 <212> PRT
 <213> *Conus marmoreus*

<220>
 <221> PEPTIDE
 <222> (1)..(19)
 <223> Xaa is Hyp

<400> 398
 Ser Lys Gln Cys Cys His Leu Ala Ala Cys Arg Phe Gly Cys Thr Xaa
 1 5 10 15

Cys Cys Asn

<210> 399
 <211> 15
 <212> PRT
 <213> *Conus capitaneus*

<400> 399
 Ser Cys Cys Arg Asp Cys Gly Glu Asp Cys Val Gly Cys Cys Arg
 1 5 10 15

<210> 400
 <211> 16
 <212> PRT
 <213> *Conus coronatus*

<400> 400
 Cys Cys Asp Trp Pro Cys Ile Pro Gly Cys Thr Pro Cys Cys Leu Pro
 1 5 10 15

<210> 401
 <211> 18
 <212> PRT
 <213> *Conus dalli*

<400> 401
 Cys Cys Asp Asp Ser Glu Cys Asp Tyr Ser Cys Trp Pro Cys Cys Ile
 1 5 10 15

Leu Ser

<210> 402
 <211> 17
 <212> PRT
 <213> Conus dalli

<400> 402
 Glx Gln Cys Cys Pro Pro Val Ala Cys Asn Met Gly Cys Glu Pro Cys
 1 5 10 15

Cys

<210> 403
 <211> 16
 <212> PRT
 <213> Conus dalli

<400> 403
 Cys Cys Asn Ala Gly Phe Cys Arg Phe Gly Cys Thr Pro Cys Cys Trp
 1 5 10 15

<210> 404
 <211> 14
 <212> PRT
 <213> Conus distans

<400> 404
 Glx Cys Cys Val His Pro Cys Pro Cys Thr Pro Cys Cys Arg
 1 5 10

<210> 405
 <211> 14
 <212> PRT
 <213> Conus figulinus

<400> 405
 Cys Cys Pro Trp Pro Cys Asn Ile Gly Cys Val Pro Cys Cys
 1 5 10

<210> 406
 <211> 14
 <212> PRT
 <213> Conus figulinus

<400> 406
 Cys Cys Ser Lys Asn Cys Ala Val Cys Ile Pro Cys Cys Pro
 1 5 10

<210> 407
 <211> 15
 <212> PRT
 <213> Conus figulinus

<400> 407
 Cys Cys Arg Trp Pro Cys Pro Ala Arg Cys Gly Ser Cys Cys Leu
 1 5 10 15

<210> 408
 <211> 16
 <212> PRT
 <213> Conus figulinus

<400> 408
 Cys Cys Glu Leu Ser Arg Cys Leu Gly Cys Val Pro Cys Cys Thr Ser

1	5	10	15
---	---	----	----

<210> 409
 <211> 16
 <212> PRT
 <213> Conus figulinus

<400> 409
 Cys Cys Glu Leu Ser Lys Cys His Gly Cys Val Pro Cys Cys Ile Pro
 1 5 10 15

<210> 410
 <211> 16
 <212> PRT
 <213> Conus generalis

<400> 410
 Glx Cys Cys Thr Phe Cys Asn Phe Gly Cys Gln Pro Cys Cys Val Pro
 1 5 10 15

<210> 411
 <211> 16
 <212> PRT
 <213> Conus generalis

<400> 411
 Glx Cys Cys Thr Phe Cys Asn Phe Gly Cys Gln Pro Cys Cys Leu Thr
 1 5 10 15

<210> 412
 <211> 16
 <212> PRT
 <213> Conus generalis

<400> 412
 Glx Cys Cys Thr Phe Cys Asn Phe Gly Cys Gln Pro Cys Cys Val Pro
 1 5 10 15

<210> 413
 <211> 17
 <212> PRT
 <213> Conus gloriamaris

<400> 413
 Cys Cys Asp Asp Ser Glu Cys Asp Tyr Ser Cys Trp Pro Cys Cys Met
 1 5 10 15

Phe

<210> 414
 <211> 17
 <212> PRT
 <213> Conus gloriamaris

<400> 414
 Gly Cys Cys His Leu Leu Ala Cys Arg Phe Gly Cys Ser Pro Cys Cys
 1 5 10 15

Trp

<210> 415
 <211> 16
 <212> PRT
 <213> Conus gloriamaris

<400> 415
 Cys Cys Ser Trp Asp Val Cys Asp His Pro Ser Cys Thr Cys Cys Gly
 1 5 10 15

<210> 416
 <211> 13
 <212> PRT
 <213> Conus laterculatus

<400> 416
 Cys Cys Asp Trp Pro Cys Ser Gly Cys Ile Pro Cys Cys
 1 5 10

<210> 417
 <211> 19
 <212> PRT
 <213> Conus leopardus

<400> 417
 Glx Ile Asn Cys Cys Pro Trp Pro Cys Pro Ser Thr Cys Arg His Gln
 1 5 10 15

Cys Cys His

<210> 418
 <211> 19
 <212> PRT
 <213> Conus lividus

<400> 418
 Glx Ile Asn Cys Cys Pro Trp Pro Cys Pro Asp Ser Cys His Tyr Gln
 1 5 10 15

Cys Cys His

<210> 419
 <211> 14
 <212> PRT
 <213> Conus marmoreus

<400> 419
 Cys Cys Arg Leu Ser Cys Gly Leu Gly Cys His Pro Cys Cys
 1 5 10

<210> 420
 <211> 17
 <212> PRT
 <213> Conus marmoreus

<400> 420
 Glu Cys Cys Gly Ser Phe Ala Cys Arg Phe Gly Cys Val Pro Cys Cys
 1 5 10 15

Val

<210> 421
 <211> 19
 <212> PRT
 <213> Conus marmoreus

<400> 421
 Ser Lys Gln Cys Cys His Leu Pro Ala Cys Arg Phe Gly Cys Thr Pro
 1 5 10 15

Cys Cys Trp

<210> 422

<211> 17

<212> PRT

<213> Conus marmoreus

<400> 422

Met Gly Cys Cys Pro Phe Pro Cys Lys Thr Ser Cys Thr Thr Leu Cys
1 5 10 15

Cys

<210> 423

<211> 14

<212> PRT

<213> Conus musicus

<400> 423

Ala Cys Cys Glu Gln Ser Cys Thr Thr Cys Phe Pro Cys Cys
1 5 10

<210> 424

<211> 15

<212> PRT

<213> Conus nobilis

<400> 424

Cys Cys Glu Leu Pro Cys Gly Pro Gly Phe Cys Val Pro Cys Cys
1 5 10 15

<210> 425

<211> 14

<212> PRT

<213> Conus pulicarius

<400> 425

Cys Cys Asn Ser Cys Tyr Met Gly Cys Ile Pro Cys Cys Phe
1 5 10

<210> 426

<211> 17

<212> PRT

<213> Conus quercinus

<400> 426

Glx Arg Cys Cys Gln Trp Pro Cys Pro Gly Ser Cys Arg Cys Cys Arg
1 5 10 15

Thr

<210> 427

<211> 18

<212> PRT

<213> Conus quercinus

<400> 427

Glx Arg Cys Cys Arg Trp Pro Cys Pro Gly Ser Cys Arg Cys Cys Arg
1 5 10 15

Tyr Arg

<210> 428

<211> 18

<212> PRT

<213> Conus quercinus

<400> 428
 Arg Cys Cys Arg Tyr Pro Cys Pro Asp Ser Cys His Gly Ser Cys Cys
 1 5 10 15

Tyr Lys

<210> 429
 <211> 15
 <212> PRT
 <213> Conus quercinus

<220>
 <221> PEPTIDE
 <222> (1)..(15)
 <223> Xaa is Hyp

<400> 429
 Cys Cys Ser Gln Asp Cys Leu Val Cys Ile Xaa Cys Cys Pro Asn
 1 5 10 15

<210> 430
 <211> 15
 <212> PRT
 <213> Conus quercinus

<220>
 <221> PEPTIDE
 <222> (1)..(15)
 <223> Xaa is Hyp

<400> 430
 Cys Cys Ser Arg His Cys Trp Val Cys Ile Xaa Cys Cys Pro Asn
 1 5 10 15

<210> 431
 <211> 16
 <212> PRT
 <213> Conus rattus

<400> 431
 Glx Thr Cys Cys Ser Asn Cys Gly Glu Asp Cys Asp Gly Cys Cys Gln
 1 5 10 15

<210> 432
 <211> 20
 <212> PRT
 <213> Conus striatus

<400> 432
 Glx Asn Cys Cys Asn Gly Gly Cys Ser Ser Lys Trp Cys Arg Asp His
 1 5 10 15

Ala Arg Cys Cys
 20

<210> 433
 <211> 12
 <212> PRT
 <213> Conus textile

<220>
 <221> PEPTIDE
 <222> (1)..(12)
 <223> Xaa is Hyp

<400> 433
 Cys Cys Arg Thr Cys Phe Gly Cys Thr Xaa Cys Cys
 1 5 10

<210> 434
 <211> 14
 <212> PRT
 <213> Conus tessulatus

<400> 434
 Cys Cys His Lys Cys Tyr Met Gly Cys Ile Pro Cys Cys Ile
 1 5 10

<210> 435
 <211> 18
 <212> PRT
 <213> Conus tessulatus

<400> 435
 Lys Cys Cys Arg Pro Pro Cys Ala Met Ser Cys Gly Met Ala Arg Cys
 1 5 10 15

Cys Tyr

<210> 436
 <211> 23
 <212> PRT
 <213> Conus betulinus

<400> 436
 Arg Cys Cys Arg Trp Pro Cys Pro Ser Ile Cys Gly Met Ala Arg Cys
 1 5 10 15

Cys Phe Val Met Ile Thr Cys
 20

<210> 437
 <211> 23
 <212> PRT
 <213> Conus betulinus

<400> 437
 Arg Cys Cys Arg Trp Pro Cys Pro Ser Arg Cys Gly Met Ala Arg Cys
 1 5 10 15

Cys Phe Val Met Ile Thr Cys
 20

<210> 438
 <211> 15
 <212> PRT
 <213> Conus textile

<400> 438
 Phe Cys Cys Asp Ser Asn Trp Cys His Asp Cys Glu Cys Cys Tyr
 1 5 10 15

<210> 439
 <211> 16
 <212> PRT
 <213> Conus marmoreus

<400> 439
 Cys Cys His Trp Asn Trp Cys Asp His Leu Cys Ser Cys Cys Gly Ser

1	5	10	15
---	---	----	----

```

<210> 440
<211> 16
<212> PRT
<213> Conus marmoreus

<220>
<221> PEPTIDE
<222> (1)..(16)
<223> Xaa is Hyp

<400> 440
Asp Cys Cys Xaa Leu Pro Ala Cys Pro Phe Gly Cys Asn Xaa Cys Cys Cys
1           5           10          15

<210> 441
<211> 16
<212> PRT
<213> Conus marmoreus

<220>
<221> PEPTIDE
<222> (1)..(16)
<223> Xaa is Hyp

<400> 441
Cys Cys Ala Pro Ser Ala Cys Arg Leu Gly Cys Arg Xaa Cys Cys Cys Arg
1           5           10          15

<210> 442
<211> 16
<212> PRT
<213> Conus marmoreus

<220>
<221> PEPTIDE
<222> (1)..(16)
<223> Xaa is Hyp

<400> 442
Cys Cys Ala Xaa Ser Ala Cys Arg Leu Gly Cys Arg Xaa Cys Cys Cys Arg
1           5           10          15

<210> 443
<211> 16
<212> PRT
<213> Conus marmoreus

<400> 443
Cys Cys Ala Pro Ser Ala Cys Arg Leu Gly Cys Arg Pro Cys Cys Arg
1           5           10          15

<210> 444
<211> 17
<212> PRT
<213> Conus marmoreus

<220>
<221> PEPTIDE
<222> (1)..(17)
<223> Xaa is Hyp.

<400> 444
Gly Cys Cys Gly Ser Phe Ala Cys Arg Phe Gly Cys Val Xaa Cys Cys

```

1	5	10	15
---	---	----	----

Val

<210> 445			
<211> 15			
<212> PRT			
<213> Conus textile			

<400> 445			
Cys Cys Ser Trp Asp Val Cys Asp His Pro Ser Cys Thr Cys Cys			
1	5	10	15

<210> 446			
<211> 16			
<212> PRT			
<213> Conus textile			

<400> 446			
Arg Cys Cys Lys Phe Pro Cys Pro Asp Ser Cys Arg Tyr Leu Cys Cys			
1	5	10	15

<210> 447			
<211> 17			
<212> PRT			
<213> Conus aureus			

<400> 447			
Cys Cys Asp Asp Ser Glu Cys Asp Tyr Ser Cys Trp Pro Cys Cys Ile			
1	5	10	15

Phe

<210> 448			
<211> 16			
<212> PRT			
<213> Conus aureus			

<400> 448			
Cys Cys Asn Asp Trp Glu Cys Asp Asp Ser Cys Trp Pro Cys Cys Tyr			
1	5	10	15

<210> 449			
<211> 16			
<212> PRT			
<213> Conus ammiralis			

<400> 449			
Arg Cys Cys Arg Phe Pro Cys Pro Asp Thr Cys Arg His Leu Cys Cys			
1	5	10	15

<210> 450			
<211> 12			
<212> PRT			
<213> Conus ammiralis			

<400> 450			
Cys Cys Met Thr Cys Phe Gly Cys Thr Pro Cys Cys			
1	5	10	

<210> 451			
<211> 18			
<212> PRT			
<213> Conus ammiralis			

<400> 451
 Cys Cys Asp Asp Ser Glu Cys Asp Tyr Ser Cys Trp Pro Cys Cys Ile
 1 5 10 15

Phe Ser

<210> 452
 <211> 13
 <212> PRT
 <213> Conus ammiralis

<400> 452
 Cys Cys Arg Leu Leu Cys Leu Ser Cys Asn Pro Cys Cys
 1 5 10
 <210> 453
 <211> 16
 <212> PRT
 <213> Conus ammiralis

<400> 453
 Cys Cys Asp Asp Ser Glu Cys Gly Tyr Ser Cys Trp Pro Cys Cys Tyr
 1 5 10 15

<210> 454
 <211> 16
 <212> PRT
 <213> Conus aulicus

<400> 454
 Gly Cys Cys Ser Pro Pro Cys His Ser Ile Cys Ala Ala Phe Cys Cys
 1 5 10 15

<210> 455
 <211> 15
 <212> PRT
 <213> Conus aulicus

<400> 455
 Cys Cys Arg Pro Val Ala Cys Ala Met Gly Cys Lys Pro Cys Cys
 1 5 10 15

<210> 456
 <211> 16
 <212> PRT
 <213> Conus aulicus

<400> 456
 Glx Cys Cys Pro Ala Val Ala Cys Ala Met Gly Cys Glu Pro Cys Cys
 1 5 10 15

<210> 457
 <211> 18
 <212> PRT
 <213> Conus emaciatus

<400> 457
 Cys Cys Ser Arg Asp Cys Ser Val Cys Ile Pro Cys Cys Pro Tyr Gly
 1 5 10 15

Ser Pro

<210> 458
 <211> 16
 <212> PRT
 <213> Conus episcopatus

<400> 458
 Cys Cys Asp Glu Asp Glu Cys Asn Ser Ser Cys Trp Pro Cys Cys Trp
 1 5 10 15

<210> 459
 <211> 16
 <212> PRT
 <213> *Conus episcopatus*

<400> 459
 Cys Cys Asp Glu Asp Glu Cys Ser Ser Cys Trp Pro Cys Cys Trp
 1 5 10 15

<210> 460
 <211> 15
 <212> PRT
 <213> *Conus episcopatus*

<400> 460
 Cys Cys Pro Ala Ala Ala Cys Ala Met Gly Cys Lys Pro Cys Cys
 1 5 10 15

<210> 461
 <211> 16
 <212> PRT
 <213> *Conus omaria*

<400> 461
 Cys Cys Asp Glu Glu Cys Ser Ser Ala Cys Trp Pro Cys Cys Trp
 1 5 10 15

<210> 462
 <211> 16
 <212> PRT
 <213> *Conus omaria*

<400> 462
 Cys Cys His Leu Leu Ala Cys Arg Phe Gly Cys Ser Pro Cys Cys Trp
 1 5 10 15

<210> 463
 <211> 12
 <212> PRT
 <213> *Conus spurius*

<400> 463
 Cys Cys Pro Arg Cys Ser Glu Cys Asn Pro Cys Cys
 1 5 10

<210> 464
 <211> 16
 <212> PRT
 <213> *Conus pennaceus*

<400> 464
 Arg Cys Cys Lys Phe Pro Cys Pro Asp Ser Cys Lys Tyr Leu Cys Cys
 1 5 10 15

<210> 465
 <211> 19
 <212> PRT
 <213> *Conus flavidus*

<400> 465
 Arg Cys Cys Arg Trp Pro Cys Pro Ser Ile Cys Gly Met Ala Arg Cys

1

5

10

15

Cys Ser Ser

<210> 466

<211> 14

<212> PRT

<213> Conus pulicarius

<400> 466

Cys Cys Lys Leu Leu Cys Gly Cys Thr Pro Cys Cys His Ile
1 5 10

<210> 467

<211> 15

<212> PRT

<213> Conus ebraceus

<400> 467

Cys Cys Glu Gln Pro Cys Tyr Met Gly Cys Ile Pro Cys Cys Phe
1 5 10 15

<210> 468

<211> 15

<212> PRT

<213> Conus ebraceus

<400> 468

Cys Cys Ala Gln Pro Cys Tyr Met Gly Cys Ile Pro Cys Cys Phe
1 5 10 15

<210> 469

<211> 14

<212> PRT

<213> Conus pulicarius

<400> 469

Cys Cys Val Ser Cys Tyr Met Gly Cys Ile Pro Cys Cys Phe
1 5 10

<210> 470

<211> 16

<212> PRT

<213> Conus miliaris

<400> 470

Cys Cys Asp Trp Pro Cys Ser Ala Gly Cys Tyr Pro Cys Cys Phe Pro
1 5 10 15

<210> 471

<211> 16

<212> PRT

<213> Conus miliaris

<400> 471

Gly Cys Cys Pro Pro Met Cys Thr Pro Cys Phe Pro Cys Cys Phe Arg
1 5 10 15

<210> 472

<211> 23

<212> PRT

<213> Conus rattus

<400> 472

Arg Gly Cys Cys Ala Pro Pro Arg Lys Cys Lys Asp Arg Ala Cys Lys
1 5 10 15

Pro Ala Arg Cys Cys Gly Pro
20

<210> 473

<211> 22

<212> PRT

<213> Conus stercusmuscarum

<400> 473

Glx Arg Cys Cys Asn Gly Arg Arg Gly Cys Ser Ser Arg Trp Cys Arg
1 5 10 15

Asp His Ser Arg Cys Cys
20

<210> 474

<211> 22

<212> PRT

<213> Conus consors

<400> 474

Gly Arg Cys Cys Asp Val Pro Asn Ala Cys Ser Gly Arg Trp Cys Arg
1 5 10 15

Asp His Ala Gln Cys Cys
20

<210> 475

<211> 23

<212> PRT

<213> Conus consors

<400> 475

Glx Arg Cys Cys Thr Gly Lys Lys Gly Ser Cys Ser Gly Lys Ala Cys
1 5 10 15

Lys Ser Leu Lys Cys Cys Ser
20

<210> 476

<211> 22

<212> PRT

<213> Conus aurisiacus

<400> 476

Met Cys Cys Gly Glu Gly Arg Lys Cys Pro Ser Tyr Phe Arg Asn Ser
1 5 10 15

Gln Ile Cys His Cys Cys
20

<210> 477

<211> 19

<212> PRT

<213> Conus aurisiacus

<400> 477

Cys Cys Arg Trp Pro Cys Pro Arg Gln Ile Asp Gly Glu Tyr Cys Gly
1 5 10 15

Cys Cys Leu

<210> 478

<211> 22

<212> PRT

<213> Conus bullatus

<400> 478

Arg Cys Cys Gly Glu Gly Leu Thr Cys Pro Arg Tyr Trp Lys Asn Ser
1 5 10 15Gln Ile Cys Ala Cys Cys
20

<210> 479

<211> 21

<212> PRT

<213> Conus characteristicus

<400> 479

Cys Cys Gly Pro Gly Gly Ser Cys Pro Val Tyr Phe Arg Asp Asn Phe
1 5 10 15Ile Cys Gly Cys Cys
20

<210> 480

<211> 23

<212> PRT

<213> Conus circumcisus

<400> 480

Arg Lys Cys Cys Gly Lys Asp Gly Pro Cys Pro Lys Tyr Phe Lys Asp
1 5 10 15Asn Phe Ile Cys Gly Cys Cys
20

<210> 481

<211> 20

<212> PRT

<213> Conus ermineus

<400> 481

Cys Cys Ser Trp Pro Cys Pro Arg Tyr Ser Asn Gly Lys Leu Val Cys
1 5 10 15Phe Cys Cys Leu
20

<210> 482

<211> 21

<212> PRT

<213> Conus magus

<400> 482

Cys Cys Gly Pro Gly Gly Ser Cys Pro Val Tyr Phe Arg Asp Asn Phe
1 5 10 15Ile Cys Gly Cys Cys
20

<210> 483

<211> 22

<212> PRT

<213> Conus magus

<400> 483

Met Cys Cys Gly Glu Ser Ala Pro Cys Pro Ser Tyr Phe Arg Asn Ser

1

5

10

15

Gln Ile Cys His Cys Cys
20

<210> 484

<211> 22

<212> PRT

<213> Conus magus

<400> 484

Glx Lys Cys Cys Gly Pro Gly Gly Ser Cys Pro Val Tyr Phe Thr Asp
1 5 10 15

Asn Phe Ile Cys Gly Cys
20

<210> 485

<211> 23

<212> PRT

<213> Conus magus

<400> 485

Glx Lys Cys Cys Gly Pro Gly Gly Ser Cys Pro Val Tyr Phe Arg Asp
1 5 10 15

Asn Phe Ile Cys Gly Cys Cys
20

<210> 486

<211> 23

<212> PRT

<213> Conus striatus

<400> 486

Glx Lys Cys Cys Gly Glu Gly Ser Ser Cys Pro Lys Tyr Phe Lys Asn
1 5 10 15

Asn Phe Ile Cys Gly Cys Cys
20

<210> 487

<211> 22

<212> PRT

<213> Conus magus

<400> 487

Glx Lys Cys Cys Ser Gly Gly Ser Cys Pro Leu Tyr Phe Arg Asp Arg
1 5 10 15

Leu Ile Cys Pro Cys Cys
20

<210> 488

<211> 23

<212> PRT

<213> Conus stercusmuscarum

<400> 488

Glx Lys Cys Cys Gly Pro Gly Ala Ser Cys Pro Arg Tyr Phe Lys Asp
1 5 10 15

Asn Phe Ile Cys Gly Cys Cys
20

<210> 489

<211> 22

<212> PRT

<213> Conus consors

<400> 489

Met Cys Cys Gly Glu Gly Ala Pro Cys Pro Ser Tyr Phe Arg Asn Ser
1 5 10 15Gln Ile Cys His Cys Cys
20

<210> 490

<211> 23

<212> PRT

<213> Conus aurisiacus

<400> 490

Glx Lys Cys Cys Thr Gly Lys Lys Gly Ser Cys Ser Gly Lys Ala Cys
1 5 10 15Lys Asn Leu Lys Cys Cys Ser
20

<210> 491

<211> 23

<212> PRT

<213> Conus aurisiacus

<400> 491

Glx Lys Cys Cys Thr Gly Arg Lys Gly Ser Cys Ser Gly Lys Ala Cys
1 5 10 15Lys Asn Leu Lys Cys Cys Ser
20

<210> 492

<211> 23

<212> PRT

<213> Conus bullatus

<400> 492

Val Thr Asp Arg Cys Cys Lys Gly Lys Arg Glu Cys Gly Arg Trp Cys
1 5 10 15Arg Asp His Ser Arg Cys Cys
20

<210> 493

<211> 23

<212> PRT

<213> Conus bullatus

<400> 493

Val Gly Asp Arg Cys Cys Lys Gly Lys Arg Gly Cys Gly Arg Trp Cys
1 5 10 15Arg Asp His Ser Arg Cys Cys
20

<210> 494

<211> 24

<212> PRT

<213> Conus bullatus

<400> 494

Val Gly Glu Arg Cys Cys Lys Asn Gly Lys Arg Gly Cys Gly Arg Trp
 1 5 10 15

Cys Arg Asp His Ser Arg Cys Cys
 20

<210> 495
 <211> 26
 <212> PRT
 <213> Conus bullatus

<400> 495
 Ile Val Asp Arg Cys Cys Asn Lys Gly Asn Gly Lys Arg Gly Cys Ser
 1 5 10 15

Arg Trp Cys Arg Asp His Ser Arg Cys Cys
 20 25

<210> 496
 <211> 25
 <212> PRT
 <213> Conus bullatus

<400> 496
 Val Gly Cys Cys Arg Pro Lys Pro Asn Gly Gln Met Met Cys Asp Arg
 1 5 10 15

Trp Cys Glu Lys Asn Ser Arg Cys Cys
 20 25

<210> 497
 <211> 22
 <212> PRT
 <213> Conus characteristicus

<400> 497
 Arg Asp Cys Cys Thr Pro Pro Lys Lys Cys Lys Asp Arg Gln Cys Lys
 1 5 10 15

Pro Gln Arg Cys Cys Ala
 20

<210> 498
 <211> 23
 <212> PRT
 <213> Conus lynceus

<400> 498
 Gly Arg Asp Cys Cys Thr Pro Pro Arg Lys Cys Arg Asp Arg Ala Cys
 1 5 10 15

Lys Pro Gln Arg Cys Cys Gly
 20

<210> 499
 <211> 22
 <212> PRT
 <213> Conus lynceus

<400> 499
 G1x Arg Leu Cys Cys Gly Phe Pro Lys Ser Cys Arg Ser Arg Gln Cys
 1 5 10 15

Lys Pro His Arg Cys Cys
 20

<210> 500
 <211> 22
 <212> PRT
 <213> Conus laterculatus

<400> 500
 Arg Asp Cys Cys Thr Pro Pro Lys Lys Cys Arg Asp Arg Gln Cys Lys
 1 5 10 15

Pro Ala Arg Cys Cys Gly
 20

<210> 501
 <211> 22
 <212> PRT
 <213> Conus laterculatus

<400> 501
 Arg Pro Pro Cys Cys Thr Tyr Asp Gly Ser Cys Leu Lys Glu Ser Cys
 1 5 10 15

Met Arg Lys Ala Cys Cys
 20

<210> 502
 <211> 22
 <212> PRT
 <213> Conus laterculatus

<400> 502
 Arg Pro Pro Cys Cys Thr Tyr Asp Gly Ser Cys Leu Lys Glu Ser Cys
 1 5 10 15

Lys Arg Lys Ala Cys Cys
 20

<210> 503
 <211> 22
 <212> PRT
 <213> Conus geographus

<220>
 <221> PEPTIDE
 <222> (1)..(22)
 <223> Xaa is Hyp

<400> 503
 Arg Asp Cys Cys Thr Xaa Xaa Lys Lys Cys Lys Asp Arg Gln Cys Lys
 1 5 10 15

Xaa Gln Arg Cys Cys Ala
 20

<210> 504
 <211> 22
 <212> PRT
 <213> Conus geographus

<220>
 <221> PEPTIDE
 <222> (1)..(22)
 <223> Xaa is Hyp

<400> 504

Arg Asp Cys Cys Thr Xaa Xaa Arg Lys Cys Lys Asp Arg Arg Cys Lys
 1 5 10 15

Xaa Met Lys Cys Cys Ala
 20

<210> 505

<211> 22

<212> PRT

<213> Conus geographus

<220>

<221> PEPTIDE

<222> (1)..(22)

<223> Xaa is Hyp

<400> 505

Arg Asp Cys Cys Thr Xaa Xaa Lys Lys Cys Lys Asp Arg Arg Cys Lys
 1 5 10 15

Xaa Leu Lys Cys Cys Ala
 20

<210> 506

<211> 22

<212> PRT

<213> Conus purpurascens

<220>

<221> PEPTIDE

<222> (1)..(22)

<223> Xaa is Hyp

<400> 506

Glx Arg Leu Cys Cys Gly Phe Xaa Lys Ser Cys Arg Ser Arg Gln Cys
 1 5 10 15

Lys Xaa His Arg Cys Cys
 20

<210> 507

<211> 22

<212> PRT

<213> Conus magus

<400> 507

Arg Asp Cys Cys Thr Pro Pro Lys Lys Cys Lys Asp Arg Gln Cys Lys
 1 5 10 15

Pro Gln Arg Cys Cys Ala
 20

<210> 508

<211> 24

<212> PRT

<213> Conus marmoreus

<400> 508

Arg Gly Gly Cys Cys Thr Pro Pro Arg Lys Cys Lys Asp Arg Ala Cys
 1 5 10 15

Lys Pro Ala Arg Cys Cys Gly Pro
 20

<210> 509

<211> 23

<212> PRT

<213> Conus nobilis

<400> 509

Glx Lys Cys Cys Thr Gly Lys Lys Gly Ser Cys Ser Gly Lys Ala Cys
1 5 10 15Lys Asn Leu Lys Cys Cys Ser
20

<210> 510

<211> 24

<212> PRT

<213> Conus parius

<400> 510

Arg Gly Gly Cys Cys Thr Pro Pro Lys Lys Cys Lys Asp Arg Ala Cys
1 5 10 15Lys Pro Ala Arg Cys Cys Gly Pro
20

<210> 511

<211> 23

<212> PRT

<213> Conus parius

<400> 511

Arg Gly Cys Cys Thr Pro Pro Arg Lys Cys Lys Asp Arg Ala Cys Lys
1 5 10 15Pro Ala Arg Cys Cys Gly Pro
20

<210> 512

<211> 24

<212> PRT

<213> Conus radiatus

<220>

<221> PEPTIDE

<222> (1)..(24)

<223> Xaa is Hyp

<400> 512

Leu Xaa Ser Cys Cys Ser Leu Asn Leu Arg Leu Cys Xaa Val Xaa Ala
1 5 10 15Cys Lys Arg Asn Xaa Cys Cys Thr
20

<210> 513

<211> 24

<212> PRT

<213> Conus radiatus

<220>

<221> PEPTIDE

<222> (1)..(24)

<223> Xaa is Hyp

<400> 513

Glx Gln Arg Cys Cys Thr Val Lys Arg Ile Cys Xaa Val Xaa Ala Cys
1 5 10 15

Arg Ser Lys Xaa Cys Cys Lys Ser
20

<210> 514

<211> 24

<212> PRT

<213> *Conus radiatus*

<400> 514

Arg Gly Gly Cys Cys Thr Pro Pro Arg Lys Cys Lys Asp Arg Ala Cys
1 5 10 15

Lys Pro Ala Arg Cys Cys Gly Pro
20

<210> 515

<211> 23

<212> PRT

<213> *Conus stercusmuscarum*

<400> 515

Glx Lys Cys Cys Thr Gly Lys Lys Gly Ser Cys Ser Gly Lys Ala Cys
1 5 10 15

Lys Asn Leu Lys Cys Cys Ser
20

<210> 516

<211> 21

<212> PRT

<213> *Conus tulipa*

<220>

<221> PEPTIDE

<222> (1)..(21)

<223> Xaa is Hyp

<400> 516

His Gly Cys Cys Lys Gly Xaa Glu Gly Cys Ser Ser Arg Glu Cys Arg
1 5 10 15

Xaa Gln His Cys Cys
20

<210> 517

<211> 21

<212> PRT

<213> *Conus tulipa*

<400> 517

His Gly Cys Cys Glu Gly Pro Lys Gly Cys Ser Ser Arg Glu Cys Arg
1 5 10 15

Pro Gln His Cys Cys
20

<210> 518

<211> 23

<212> PRT

<213> *Conus wittigi*

<400> 518

Leu Pro Ser Cys Cys Asp Phe Glu Arg Leu Cys Val Val Pro Ala Cys
1 5 10 15

Ile Arg His Gln Cys Cys Thr
20

<210> 519

<211> 17

<212> PRT

<213> Conus omaria

<400> 519

Cys Cys Lys Tyr Gly Trp Thr Cys Leu Leu Gly Cys Thr Pro Cys Asp
1 5 10 15

Cys

<210> 520

<211> 17

<212> PRT

<213> Conus omaria

<400> 520

Cys Cys Arg Tyr Gly Trp Thr Cys Trp Leu Gly Cys Thr Pro Cys Gly
1 5 10 15

Cys